

ggtagaggaca actggcacat agttttcttaa atctctccca gtattcatat aaactctctc 300  
cattgagttg cataattcct gaaatatctt ttctgatggg tgtgggtcttg 350

<210> 4658  
<211> 410  
<212> DNA  
<213> Glycine max

<400> 4658

agcttcaagt gatacagaca gtgaaatcat ttttgatgag cttgccacat cctatagaga 60  
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aaatctggag gctgagaagg aggcacatga agaggaaatc tctgaactta aaggagaaat 180  
tggctttctg aattctaaac cggaaaatat gacaaagtca ataaagatgc tgaataaagg 240  
ctcagatgtg ctcatgagg tgctacagct tgggaagaat gttggaaacc agagaggact 300  
tggatttaat cataagtctg gtggcagaac aaccatgaca gaatttggtc ctgccaaaaa 360  
cagcactgga gccacgatgt cacaacattg gtctcgacat catggaacgc 410

<210> 4659  
<211> 387  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4659

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gaccttttgg acacgtcgtc cttttgaatt tatcaaaatc tgggtacttta aacttggggg 180  
gaataatgat gtcaggatcc acacatagat ccggtaaata caagaacgga tagttgccga 240  
ggccttctac cgctctcagc ctctctttaa gtagatcaat ctttcccttg tcccttgcaa 300  
agggagaag ttccttaacg ggtgcggatg gagaccggac gtggcggact atgtctggtt 360  
ggggcaactc atgggggggt gattcct 387

<210> 4660  
<211> 370  
<212> DNA

<213> Glycine max

<400> 4660

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acaagctcta tactcccaat agtagaaaga tcgtcataag tcgcgacgtg gagttcgacg 120  
aagaagattg ttgggattgg agtgttcaac aagataagta tgattctctt ccttattttg 180  
aagaagatga tgaaattgaa cccacccatc atagaggaac atattacacc acctgcctca 240  
ccgacaccaa ggctggatga aacaagttca agtgaaagga caccgacgact aaggagcatt 300  
gaagagattt atgagctaac ccaaaaccta aatgacatta acctcttttt tctttttggg 360  
gactgtgagc 370

<210> 4661

<211> 429

<212> DNA

<213> Glycine max

<400> 4661

tcattccttt ttctactcat gtgtccaagt ctttgatggc atagggttga attgttgaca 60  
gcctcagtaa ctgctaccat atcctcatct gcaatcatgt aaagagatcc tcgcttcttt 120  
tcacgagcca caatgagatt gccttttggt accttccaag ctctatatcc aaaagtgggtg 180  
taatgccct cattatccaa ctacctata gatgttagat ttccctttaa ggcaagaata 240  
tgtcaaacat tgtacagtgt ccatagggat ccactagagg tcttgatgtc aatatcacct 300  
cttccgacaa tgtcaagaga ttttccatct gcaaggtaaa ctttctcaaa tcttccaaaa 360  
atatagttag aaaataaatc tttaaagga gtggtgtgga atgacgcacc tgattcataa 420  
tctatgaat 429

<210> 4662

<211> 414

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4662

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ttggtgagga actatgttct ctcatgggaa gatggncagc aaaggggttt ttagtcctta 120

ccctactcta acatacccaa cataactaat acatatgttt ttattctttt tacaggtgtt 180  
gaggaaagaa tccttgagtt tcaagaacct ctggatttga ggtcaaattcc ttttcaaggg 240  
agagggaatg atgcaatcct accccacaag gtcattggat agaagactcc aagaagattg 300  
ggccagagat ggccttaggg ttctcatgag ccttagggta gatttcgagc ccatggacta 360  
aatatgagcc cacttatctt tgtacatatt aaattaaggt ttcattattt ttg 414

<210> 4663  
<211> 446  
<212> DNA  
<213> Glycine max

<400> 4663

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gcagaacaat tatgaccttt ccagcaacag ataccacctt ggatggagga atcaccctaa 120  
cctcagatgg tccagccctc agcaacaata gcagcctgct tcttccttcc aaaatgctgc 180  
tggcccaagc agaccatata ttctccacc aatccaacaa cagcaacaac cccagaaaca 240  
gccacaatt gagggccctc cacaaccttc cctcgaagaa cttgtgaggc aaatgactat 300  
gcagaacatg cagtttcacc aagagaccag agcctccatt cagagcttaa ccaatcagat 360  
gggacaatta gctaccccaa ttgaatcaac aacagtccca gaattctgac aagctggcct 420  
tctaaactgt cccaaatccc aaaaat 446

<210> 4664  
<211> 436  
<212> DNA  
<213> Glycine max

<400> 4664

tgactactaa catctaggta aacttccagt ctaaagattt gatgataaat ccactacatc 60  
aagctcataa ttgcacgaaa gattctcgaa aagcatcccg ggtaatttgt tcccagaaat 120  
atttcagata agtaatagaa ggaagtgaca acaatcctgg ttgaaaaggc cccacaaatg 180  
aattcgatga aatatccaat cgctcaagct gatagtatga actcaattta gcccgaaatc 240  
cacacctgaa gctattttttt cttacaacta gtataaccaa cctgttaccg agctgacgaa 300  
actgcggtcc aaaagcatta tcattcaatt caagcacttg aatattcgtc aaacggctta 360

aatcacgcac cggccccata aaggggaatat tataaagtga aaaggggtctc aaattctcca 420  
cattaccaag cgaatt 436

<210> 4665  
<211> 529  
<212> DNA  
<213> Glycine max

<400> 4665

tgcattacct cttagtaggt ggtgtaagct ctattggagc ttgtatgcct atgatcttct 60  
tcattaatgg atttctttgc ttcttggaag atgaatggcc gcggaatgga gaaggaagag 120  
agagaggaga tgccacttaa aggagaagat gagtctagaa gaagctcacc accataggag 180  
gccatggata agagcttgga ggaagaatga ggataatgaa aggagaggaa gcgaagagca 240  
tgaaattttg tgctctaaaa gagctctgaa atctgaagtt taattttcaa atcatcaaag 300  
ttgaaaaaaaa tgcacacaca tgacctctat ttatagccta agtgtcacac aaaattggag 360  
gaaaatttga atttcacttg aatatgtgga gccaaacttt ggagccaaaa tttcactaat 420  
tatgataagc gaattttaag tatggtgttg cccacctatc ccagatcaat tccaagattc 480  
tccactaagt gtgcttaggt gtcatgaagc atgtaaagca tgaacgaca 529

<210> 4666  
<211> 531  
<212> DNA  
<213> Glycine max

<400> 4666

tttcttaaaa atccaaaaag ctagagctta ttacatacc tctctaatag ctaagctcat 60  
ccccatgaca aaatacatga aaatacaaaa taaaaatccc tattataaag actactcaga 120  
atgcctcgaa atacaaggct aaaaccctat actactagaa tggacaaaat acaaggccca 180  
aaciaaggaa aaccctattc taatatttac aaagataacc ggcctcatal ttagcccatg 240  
ggcttgaaat ctattctaag gctcatgaga accctaagac ctttccttgg atctctggcc 300  
taatatactt ggagtcttct atccaatgcc cttgcggggg aggattgcat caacttcctt 360  
ggcttcttgt acaaccattc ttttttagctc tgagggaaaa cccaattcc taattttccc 420  
atccttaact tgtgttacca gggggataaa aggaacggct agctcctcgg tttcattacc 480



ttcacaaagac tcattatccg atctataccc ttttatcgca acaaaaaaaaa a

531

<210> 4667  
<211> 456  
<212> DNA  
<213> Glycine max

<400> 4667

tcacacagtt tattttttctc atacttgagt tttggaagac caattttctaa gactttccta 60  
actagaagaa taagatgatg catattaatg tgtgcatccc tacgatgcca caaccaagaa 120  
tcatctatatt tacttaccaa gtaactcaac tcatgaaatg atgcatgctt aacattcagc 180  
atatagatat tacctattct cttgccaatg tggacaactt tatcggacat ggcttcactt 240  
gtaagacaac aattttttggt gaattcaatt ttgaagcctt tgtcccaaag ttgactaatg 300  
cttaaaaggt tgtgttttag tccatccaca tataacatgt tctttatttg agttttgtgt 360  
tgatttccaa tatttccttc tcttattatt tttcctttgc tattgcctcc aaatgtgaca 420  
tgtctccat cttttgacac aaagtcagag agttta 456

<210> 4668  
<211> 515  
<212> DNA  
<213> Glycine max

<400> 4668

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tcattatgac ctttcaagca atagatacaa tccaggttga agaaatcatc ccaatctgaa 120  
atggacaagt cctccacaac aacaacaaca tattcctcct tttcagaatg ttgctggtcc 180  
aagcaagcca tatgttcctc ctccaatgca gcaacagcag cagcaatcac aacaaagaca 240  
acaagcaact gaggcctctt ctcaaccttc cttagaagag ttagtgaggc aaatgaccat 300  
ccagaatatg caatttcagc aagagacaaa agcctccatt cagagtctga caaataagat 360  
ggggcagatg gctacttaga tgaaccaagc tcagtcccaa aattctgaca aattggcttc 420  
acaaactgta caaaatccaa aaaatgtgag tgccattacc ttgaggtctg gcaaccaa 480  
tcaagtggcc tcaccagtag cagcacctgc acctg 515

<210> 4669  
 <211> 544  
 <212> DNA  
 <213> Glycine max

<400> 4669

ttgatggtgt cgagaagaaa tcacatgttt gtcacatca aaaaggggga gaatgtgaat 60  
 gtatgtatac atgattttga tgatgtcaaa gaagaatcta acaaggctac ttcaaagtat 120  
 aagcatttgc ttcaagaata attcaagatt gcttcaacaa acaaagcctt gtttcaagat 180  
 tactaaaga ccaagccttg ccttaaaaca aagtgtttc aagacatgca aggctctggt 240  
 aatcgattac caggaagtgt aatcgattac ccgaagcacg gttgagaaat agctgttgaa 300  
 aaaggttttg aatttgaatt ttcaacatgt aatcgattac catatgtctg taatcgatta 360  
 ccagcaacga aactttggaa catcaaattc aaaagtcata accccttcaa ttataactgt 420  
 gtaatcgatt acacaaacat tgtaatcgac taccagtga aagtttttag aatatctgcc 480  
 accgccacat cttttcatta gatttgtgaa tggatcatca aagcctaata atagggtgact 540  
 tggg 544

<210> 4670  
 <211> 273  
 <212> DNA  
 <213> Glycine max

<400> 4670

tacttaagct ttatcctttg gatctttaag tgatcgagttt ggggaatttg atttatctca 60  
 tccagcgcca gtgttgcaac ccacatactc aactgcttt ataaacatga aggctgtccc 120  
 agttttctac caagttccgg attgaagagt taattttgtg tagtttttgg gactctgaac 180  
 tgtttttgtg agccaccttg atgtcacctt aacatcaagt gttggacctc actgtgtaaa 240  
 gttgatctct ttgttagaaa agcacctctg gtg 273

<210> 4671  
 <211> 248  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4671

agcttggtca cntncttttt caccacatcc agaatgatta tgttgagtcg cccgctgtgg	60
ctgcctcact ggcttatctt catcctctaa aagcatccca tgcatgccgg tagatgggct	120
aatactagga atgtttgcta aagtccatct aatggctttc ttgtgcttct tgagaactat	180
caacaacctc tcgtcttgct taccagcaag ggaggcacag atgatcactg gacaattttt	240
cttgtcct	248

agctttgatc	cgctctata	ttttccacaa	tttcattttc	tctccagata	atgagcttct	60
ggggaagggt	agatgggaca	gccccaaactc	catgaatcca	cttccttcct	aatagcaagt	120
taaaatttagc	cttagactgt	atcaccacga	aaagagttgg	tcgaactata	ctgcctacag	180
caacatctac	ttgaatggct	cccaaagaat	agtcagcttt	accctcataa	ttccaaagca	240
caatgtttgtg	ggcagataga	tcagtgtcat	gtttcccgat	cttgtagagc	atagatcgag	300
gcattaagtt	gacagccgct	ccttcatcaa	tgagcacttt	gttgattcca	acattctcaa	360
ctcttgctct	gatgaaaaga	ggtttgagat	gactttttat	ctgaaaatct	ggcttttcga	420
aaaaagctaa	tttgctcttc	ccccacacc	attattcata	a		461

tcaattctga	atttcgagcg	tctcgatata	ctatgggaca	ctttcggacg	tctgagtaag	60
aagttattgt	cgttttgaat	ttgcatagag	cttttgtttt	caatttcgag	cgtctcgata	120
tattacgaga	gtcaatcgga	cctccgagta	aaaagttggt	gttgtagaa	tttgctcaaa	180
acttcttttc	tgaatttcga	gcgtctcaat	atactacggg	acacaatcgc	aaatcagagt	240
aaaaagttat	tgtcatttga	ttttgctcag	agcttctggt	ctgaatttcg	tgcattctga	300
tatactacgg	gacacaatcg	gacattcgag	taaaaagtta	ttgtcgtag	atttt	355

<210> 4674  
 <211> 387  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4674

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 atcaatctca agtacagttt gccctagaaa ggggactccc agcattgctt ggtgtactaa 120  
 gcattcacag gctaacattc ccttcaagat catttgatat ggtccattgc tctagatgcc 180  
 ttgtcccatg gactgattat ggtattactt taatcttttc acttaaacad taaatgtatg 240  
 cattagaaaa aatatatttt tttaatttcc tacttccatt ctgagtgttg gaaagttcta 300  
 ggteccctgc gtcagttatt gggatgcttt atatatctaa tgggcatttt tatttagtgt 360  
 taattggntt tgacacggaa tctaaca 387

<210> 4675  
 <211> 380  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4675

tggagaggtt tcttccattg gtagagttca cttataataa cagttttcac tctaccattg 60  
 gcatgactcc ctatgaagct ttgtatggta taagggttag gacacccta tggttggttag 120  
 agcacggaaa aggcctcacc ttacgaccag aagtgggtaca gtaaaccact tagaaagcta 180  
 agctaattta ggaaaggatg agaactggtc agagtacgca gaaaagttat catgataaga 240  
 ggaagaaaga tctggaattc gacgggtgtg atcatgtatt cttgatagtc actccatgga 300  
 ctgggggttg gcgagcattg aaattccgaa aacttacacc tcgcttaatt ggtcctttcc 360  
 taaatcttaa taaagttggc 380

<210> 4676  
 <211> 406  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4676

agcttctgcc actcactgtt ctaaattgag cctctacaac atgtcatgcg cagtgcctaaa 60

atcctttgta aatatctcct atctagtcac actacatggt ataagttagg gcttgaatgg 120  
 ttctttttcca aaagatatct tgcaaataac aacgttgaag atgcttgact tctcagacaa 180  
 acaagatctt ggggggttctt tgccaaactt cccacaacat ggttctcttc atgacctgaa 240  
 tcttagctat acaaatttct caggagagct tgcaagtgc atttccaatt tgaagcaggt 300  
 atttgcaatt gatctatctt actgccaaat taatggtaca ctttctaatt cattctcaga 360  
 actcatccaa ctgtcttatc tagacttgtc ttacaataac ttaca 406

<210> 4677  
 <211> 301  
 <212> DNA  
 <213> Glycine max

<400> 4677

agcttctcga tatattatgc gcttgaatcg gatttacatt tgaaaagtta tgaccatttg 60  
 aagttctcga gagcttccgt tgttacattt cgagcatatc catatattat gcgcatgaat 120  
 cggactttca ggcgataagc cttgacccta tgaatttctc aagagctttc gatgataaat 180  
 ttgagagtc tcgatataatt atgagcctga atagctgtac cgcgtgaaaa gttatgacag 240  
 tgtgagaccc tcgagagatc tcgttgtata attgagagag actaagtata ttaagcgccg 300  
 g 301

<210> 4678  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<400> 4678

agcttatgcy gcaaacatct acaatagacc tcctcaacct cagcagcaga atcagccaca 60  
 acagaacaat tatgacctct ccaacaacag gtacaatctc ggggtggagga atcatgccaa 120  
 acagcatcaa caacaatctt attttcaaaa tgctattgcc ccaagcagac catacattcc 180  
 tccaccaatc cagcaacaac aacagcaaca gcccagaaa cagcagacag ttgacgctcc 240  
 ttcgcaacct tcccttgaag aacttgtag gcaaatgact atgcaaaaca tgcagtttca 300  
 acaagagacc agagcctcca ttcagagctt aactaatcag atgggacaat tggctacaca 360  
 gttaaatcaa caacagtccc agaattctaa tagattacct tctcaatctg tccagaatcc 420

cgataatgtg agtgccatac attg

444

<210> 4679

<211> 443

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4679

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ctatacgaga catcttgcca aacaaagtca ggtagccat aactcgctg tgctttttct 120

tccatgctat atgtagcaaa gtcattgatc ctgtcaagtt tgatgagctg gaaaatgagg 180

ccgcaattat actatgccag ttggagatgt attttcccc tgctttcttt gacatcatga 240

ttctcttgat tgtgcatctg gtcagagaaa tcaaatgttg tggtcctggt tatctacggt 300

ggatgtaccc agttgagcga ttcattgaaga tcttaaaagg atatacaaag aatctatatc 360

atccagaagc atctattggt gagaggtaca ttgcagaaaa agccattgta atttggtcag 420

aatacattca gaaggctaaa cat 443

<210> 4680

<211> 443

<212> DNA

<213> Glycine max

<400> 4680

ttacacatat actgtaatcg attaccagag tagattctta taatatattc tcaacagtca 60

catcttttta tgtggttctt gaatgactat caaaggccta tatatatgtg acttgagaca 120

cgaatttgcg aagagttttt cagaacaaaa aggtcttata ctcttataaa gaaaaatcgg 180

tttatcctct taaaaattcc ttggccaaat tacttatgat tcaataagga attatttgag 240

tgctcaaatt gttcaatcta tctctttcaa gagagatttc ttcttttctt cttcttcatt 300

ctgaaaaggg attaagagac cgagggtctc ttgttgtaa agaattctaa acacaaagga 360

agggttgtcc ttgtgtgttt agaacttggt aaaggaactt acaagatagt ggaactctca 420

agcgggtctg cttgtgactg aac 443

<210> 4681

<211> 433  
 <212> DNA  
 <213> Glycine max

<400> 4681

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 catttctggc gctaaactgc tgggagttgg aagccatctt ctcaattaaa tttctggctt 120  
 cagcaggagt catgtctcca agggctccac accactggca gcatttatca tacttctctc 180  
 catattactg agtccttcat aaaaatattg gagaagcagc tgctccgaaa tttgatggtg 240  
 agggcaactg gcacatagtt ttttaaactc ctcccagtat tcatacaggc tctctccact 300  
 gagttgtcta ataccttaga tatccttctt gatggttgtg gtccctggaag cagggaaaaa 360  
 aatttctaag aatactctct taaggctcat ccagctcatg atggaccttg gagcaaggta 420  
 atacagtcag tcc 433

<210> 4682  
 <211> 451  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4682

ctaagctnng tacaattctc tcatectatc ctccaactcc catgtagaat caccctcatc 60  
 ggttccccac tgcaccttca ccaacgcgat ctcttttctt ttcaacgact tcattcttcg 120  
 gtcagtgatc ttctgagggt gtgctttata ggtgagggtta tccttcacct gtacctcgtc 180  
 cactgcaaga atatgtgatg gatccggggt gtaccgtctc agttgagaga catggaacac 240  
 aggggtgcaa ttcgataaac tcggaggtaa ggcgatatga taagctacag gcccaatctt 300  
 cttcaaaatc tgatatggac ctagatactt ggggtgtcaac ttcctagcct tgagagctct 360  
 tccaactncg gttatgggag aaaccttcaa aaacacatgt tcttcttctt gaaaatctag 420  
 tgggttccac cttctatcat aatagctctt c 451

<210> 4683  
 <211> 355  
 <212> DNA  
 <213> Glycine max

<400> 4683

aagagcagtt tccaacaaaa aaatggaaga ggcagagaaa gagatcttgg aaacgttttag 60  
 aaaagtagag gtaaacatac ctctgttgga tgcaataaag caaattccaa gatatgccaa 120  
 attcttgaag gagctgtgca ctaataagcg gaagcttaaa ggaagtgaac gaattagcat 180  
 gggcagaaat gtcttcgcat tgattgggtca atctgttctt caaattcctg aaaaatgcaa 240  
 agatccaggt acattcagca taccttgtat tatagggaat agtaagtttg acaatgccat 300  
 gctagattta tgagcctctg ttagtggtat gcctctgtcg atttttaatt ctcta 355

<210> 4684  
 <211> 431  
 <212> DNA  
 <213> Glycine max

<400> 4684

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 atatcacctt gcgcaattta tcaatttttt gagcaaggac agccccaat gcataatttg 120  
 atgcatcaca cataagctca aaaggggctg tccaatcacg tgcttgatg atgggggtgg 180  
 tagtaaacgc tcttttgagg caatcaaaag cctctttgca tctgtcatta aagtcaaact 240  
 ccacctcctt ttgcaacaag ttggacagtg gaagggtac tttgctaaaa ttccttacia 300  
 agcgctgtga gaatcctgca tgaccaagaa aagatcgac ctctcgaca caatagggtg 360  
 taggcaattg cgaaataaca caactctttg caggatctac ttcaataccc ttattggaaa 420  
 taatgtggcc t 431

<210> 4685  
 <211> 432  
 <212> DNA  
 <213> Glycine max

<400> 4685

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 tgcatttgca aataaacgtg atgatattct aactggacaa tgttctgtca tgcattccaa 120  
 tattccatga tctttgctat ttttttagt gatataattt tatatatgag atatgtgagt 180  
 ttgcgtttat gttttgaaga taaggagtat ggaccaagaa ctgtaaaaga tttgaagtta 240  
 attagtgccg gataaatatt ggagaacaac agaacagtgg gagaatgtca gagtccccctg 300



tgtgatctac ctggtggagt tataacaatg catgtggttg tgcaaccacc ttctgtgtga 360  
gaagggtag tattactata tactcggtta tttataggca tgccacacag tctgtttact 420  
cgtatataca gc 432

<210> 4686  
<211> 424  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4686

tagaaactaa gctggattcc tanatgtaca actgancatg gtgtttatat aaatgtcatc 60  
aataactacta acttgactgt agtgtgcctg tatgtagatg acttgcttgt gacatgttat 120  
aatgagacta aaattgccaa cttttaagga gagatgatga gagaattcga tatgactgat 180  
ttggacctta tttcttattt tcttgaatt gaattctaga gagctgatga aggagtgatc 240  
atgcatcaat ggaagtatgc aagagatgta ctgaagaagc tcatcatggt tgactcgaat 300  
tctgcagaca catccactgc cactggtgtg aacttgggtga aagatcctaa tgaagaagac 360  
atagatgtac tctgtatata cacatggtgt gctcactgag gtatcttttag tgtactagac 420  
ctga 424

<210> 4687  
<211> 450  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4687

ctaagcttta gccactacag atatttcctc aaagatccca acggttaaata catggtaaata 60  
tgtcttgtga agttgaaaac caaatttaga gaagatccaa cgggttaacga aggctggaca 120  
gtgtttctac cgaggcagct tcatgtagtt ttctctagaa gcttcattaa gaggcttcct 180  
ccagaagctt cattaagagg cttctagcac actacagaca tcttctaaac gatcccaacg 240  
gtcagatcat ggaaaagttt tttgtgaagt tgcagaccaa atttcgagaa gatccaacgg 300  
ttaatgaagg ctgggcagcg tttttaccga ggcagcttca tgtagctttc tctagaagct 360  
tcattaagag gctttctcta gaagcttgct cgtggcttct atgagaagct ctctgaagag 420

gattctttga gaagctacat ncttatctat

450

<210> 4688  
<211> 424  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4688

agctttagg attttgtgat agtggatttg ccggagatgt tgatgataga aaagtactac 60  
cggatttgta ttttttatgg gtgatttgtt ttttacatgg agttctaaga agcaagacat 120  
tgtgacactt tttacttggt aagccgagta tgtagctgca acttcttgca catgtcatgc 180  
catttggtt agaagattgt tggaggaact tcagttgttg caaaaggaaa gcacaaagat 240  
ctatattgat aatagatctg cacaagagct tgccaagaat ccggtgttcc atgaacgaag 300  
taagtatata gatacaaggt agcatttcat tagagagtgc attaccaaan aagaagtaga 360  
attgactcat gtgaaaactc aagatcaagt tgcggatatt ntcaccaagc ctcttcaaatt 420  
tgaa 424

<210> 4689  
<211> 444  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4689

agcttcacaa ggagttacat caatgaacat cacaaaataa accccaattt gatactctaa 60  
ggatccctac acatgttcat ttttaaccaa attgcaataa actcatccct tatctctaag 120  
cgggctcacg ggtgcagctg gcagggatat caacgtctct agtgggtccc taagatttct 180  
gaaatttttc ctctgtttgc tttgttaggg tttccaagtg ttagagagaa ggagaagaaa 240  
ttggagcctc caattcactg tatatgttca atgagaattt ctccctccat agacattact 300  
ttacaaatcc caacactaga catgtgtaga aattagttcc aaaggtggtg tccaaatttc 360  
actaggatcc aacagttaac aagtcggga tcgtagtnt cttgggatgg gtttgatgt 420  
atatgggaat .gagatcctaa tctc 444

<210> 4690  
 <211> 423  
 <212> DNA  
 <213> Glycine max

<400> 4690

atacaagaat gaagctctga taccacctgt tgtacaagtg gcctcaaata tcttaagaag 60  
 gggggggttga attaagatat taaaaattat ttcccccaat taaaaattct actttgattc 120  
 caatacaagt tccaagttcc cttaaagatg gattttctaaa caatgattca aattaaacaa 180  
 tctgaatata aatgtaaagc aataataaca taaaagagtt taatggaaga gaaagtgccca 240  
 actcatatct atactgggtc ggccacaccc ttgtgcctac gttcagtgcca caagcaacct 300  
 gcttgagagt tccactatct ttgtaaatcc ctttacaagt tctgaaccac acaatgacaa 360  
 cccttacttt gtgttctgat ttgtttacat caagagaccc tccgtctctt aactcctttt 420  
 tga 423

<210> 4691  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4691

agcttgtaaa ctagccatgg tctagctact tgcataccct gagggatgac catgtagact 60  
 tcttcattta aattaccatg taagaaaaca ttgttcacat ctagtgttt gagatgccac 120  
 ttattaatag cagctaaagc caataaaaaat ctactatgg ttagtttaac tactggagag 180  
 aaagtgtcca ggtagtcttg ttcttccacc tgagtatacc cttttgccac taatggcttt 240  
 atacctctct atggaaccat cagattttgtg attgatctta tacaccatt tacaatcaat 300  
 tatagtcttg tgatgaggaa gatcagtgag aacctangta tcattaagct ctagtgtttt 360  
 gatctcaaca ttcattggctt caatccaatt aggatcctta gatgctccac tgtataactg 420  
 aggttcaaca ctctgtgtga t 441

<210> 4692  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<400> 4692

agcttcagta aaatgggaca gctggcctag atgatgcaat cctaccccc cccccaaggg 60  
cattggatag aagactccea gaagattggg ccagagatgc aagagaaggc cgtaagggtc 120  
tcatgagcct tagggtagat ttggggccca tgggctaagt atgagccac ttatctttgt 180  
acatattaga ttaggatttc attatTTTTT ggtcttTgtat gtagggcttc ataatgtagg 240  
tagggTaccC tagaaatgta ggattTTTTca gcccttTgtat tttagggcac ctagactagt 300  
ttttgtatta cgggtagttt tgtaatttca catgcattaa gtgaatattt gatgtgtgtg 360  
ttgagaaatc aatttaattg aattgggaga agcccaatcc aattataatt tagaggggga 420  
ggtgagcatt tgcttTctgc acctcattgc caca 454

<210> 4693

<211> 430

<212> DNA

<213> Glycine max

<400> 4693

agcttcggtc ttcaatttcg agcgtctcga catatttcgg gactcaatca gacatccgag 60  
taaaaagtta ttgtcatttg aatttTctca gagctaaggc attcaagtcc gagggTctcg 120  
atatattaca ggactcaatc agacatccga gtaaaaaagt tattgtcgtt tgaatttTct 180  
cagagcttcg gcattcaagt ccgagcgtgt cgatatacta cgggactcaa tcagacatcc 240  
gagtaaaaag ttattgtcgt ttgaatttTc tcagagcttc agtcttcaat ttcgagcgtt 300  
tcgatatatt acgggactca atcaaacata cgagtaaaaa cttattgtcg cttgaatttg 360  
ctcagagctt tggTattcaa tttccagctt ctggatatat tacgggtctc aatcagacat 420  
ccgagtaaaa 430

<210> 4694

<211> 450

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4694

agcttctntg agaaaacttc cttgagaagc tagagcttag ctacacacac ccctctcata 60  
actaagctca cctccttgag aagcatcctt aagaagattc gtaaagaagc tagagcttag 120

ctacacatac ctctctaata gctaagctca cctccttgag atgagaagct agagcttagc 180  
 tacacacccc ctataatagc taagctcacc cccatgacaa anaacatgaa aataaaaaaa 240  
 agtccttatt acaaagacaa ctcaaaatgc cccgaaatac aaggctaaaa ccctatacta 300  
 ctagaatggc caaaataaaa ggccttgacg aaggaaaaac ctattcgaat gggtcataat 360  
 tttcacacgg atgtccgatt cggtacataa ctcatctaga cgctcgaaat tgaacaacgg 420  
 gagctcttga caattcgaat ggtctaacaat 450

<210> 4695  
 <211> 431  
 <212> DNA  
 <213> Glycine max

<400> 4695  
 agctttaagc aaattcaaat gacaataatc tttgactcgg atgtccgatt gagtcatttt 60  
 ataatttgag acgctcaaaa ttgaatgcag gagctcttac caaattcaaa tgccaataac 120  
 tttttactcg gatgtccgat tgagtccegt aatatatcta gatgctcaaa attgaaaaca 180  
 gtaactctaa gcaaattcaa acgacaataa cttctaactc ggatgttcga ttgagtcatt 240  
 taataattct tgacgctaga aattgaatac agaagctctc accaaattta aatgacaata 300  
 actttttact cagaagtctg attgagtcct gtaatttatc tagacgctca gaatcgaaaa 360  
 catatgctct taggaaattc aaacgaatgt aacttttgac tcagatgttc gattgagtc 420  
 tttaataatt c 431

<210> 4696  
 <211> 457  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4696

agctnntgca tagtttggat aaatatacac atgcgatcat gacaatgaca aaacagatcg 60  
 atttatgttg tgtgaatttt tcaattttgt tacggaatgt atgtttttta tttgcgatat 120  
 aattcaaaca ctgaaaagat tcttttttac atttttatct aatcatgaaa tttaaattgat 180  
 tgagtttttg taataatcac ttanaaaatt atatttaaaa taatttctaa ttagttgata 240

gtataat ttttttttac aataacaaca tgtaaagt aaaatgttaa attgattgaa 300  
 ttttaattnt tatggttacc tcctttacgt ggactaaact gtaatat ttaaacaatt 360  
 aagaaattta gtgtaatgta taaggagtgt tggtataata tttntaaaat aattaagaaa 420  
 tgtagtata ggaatagaaa aaacatggag agattga 457

<210> 4697  
 <211> 448  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4697

agctttnttc agtcgtctgt aaggatgatt ggggtgtaga aaacggcgat gcctactgta 60  
 gactgttttt cttccatgtt ttagttgtat gtagcttggtg ttttcttcac agatggggca 120  
 tgcattgatga cccttaacac tgtaaccgct gagatttcca tatgggtggaa agtcattaat 180  
 ggtacaaaaa agcattgcac gcatttcaaa cgtttccttg caaaacgcac caaacactac 240  
 aacccctgg tccaacaact tttccaggtc ttcaaccaac ggacttagat aaacatcaat 300  
 gtcatttcct ggctgtctta ggctgatat catcatagac aacatcatgt attttcgctt 360  
 catgcacaac caaggaggca aattgtaaat tactagcaga actagccatg aactgtgttg 420  
 agtgcttaag gtgcatatg gattcatt 448

<210> 4698  
 <211> 338  
 <212> DNA  
 <213> Glycine max  
 <400> 4698

tgaagctgac aggatcaaca atggttggtt gaattatctc cttagctggg aagacacccc 60  
 atgtgacagc attaacatca gtttgaccca cattagattt ccagctcccg tctttattca 120  
 cagtcataata agttcaagat gtttgatcct tgcattcatc aacaagtgca tccagctttt 180  
 ccttagagca gaagaactct acatatgcct tctggtaaac ataccgcct ggtccacccc 240  
 agactatgcc aaatttcaaa cacaacgat ttactgtatc tcatatccac caaccaatat 300  
 ggaccagata tgaataccct catcacaac tgcaccct 338

<210> 4699  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4699

acaaaattct tgaccgnttc cnnnttggga ccntggactt catgtcccgg aggggtctcct 60  
 ggagatgctc ccctcactac cgttggagga ggcaaggaag gagacggaca cgggtgctctt 120  
 cgggggccgtc gacgagctct tggagaaaac cgggtgttgaa gccaaagaca ttgggattct 180  
 tgttggtgaat tgttgctcgt tcaattccac accatctttc tctgactcaa ttgtcaaccg 240  
 gtacaagctt agaggaaca ttttggctat aattctagtg ggatgggggtg cagtgtctggg 300  
 gtcttgctgt tgacttggca cacagttcct caggggtctct cttacatcat ggctataaat 360  
 aatattcatg cattttgatt gtttactgca tacata 396

<210> 4700  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<400> 4700

agcttgaagg aaaactggat gcattgggta acttggtaac ccagctggct ttgaaccaga 60  
 aatctgtacc tgttgcaagg gtttgtgggt tgtgctctc tgctgaccac catacagacc 120  
 tttgcccttc catgcagcaa cctggagcaa ttgagcagcc cgaagcttat gctgcaaata 180  
 tttacaatag agctcctcaa cctcagcagc aaaatcaacc acagcagaac aattatgacc 240  
 tctccagcaa cagatacaac cctggatgga ggaatcacc taatctcaga tgggtctagcc 300  
 ctcagcaaca acaacagcag cagcctgctt cttccttcca aaatgatgct ggcccaagca 360  
 gactatacat tctccacca atccaacaat agcaaaagca ccagaaacaa ccaacag 417

<210> 4701  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<400> 4701

agaatcatta cgcataggca aaagatcaag aggagttagt ggattaaaac cataaacaac 60

ttcaaaagga gaacaattag tgggtgctatg aacagctcta ttgtaagcaa attcaacatg 120  
 gggtaaaciaa gcttcccaag tttttaagtt ctttctcaaa actgtcctaa gcaaagttcc 180  
 caaagtacta ttaacaactt ccgtttgccc atcggattgt gggtgacaag tgggtgaaaa 240  
 taacaatttt atgccccact tgctccacaa agtgcttcca aaatgactta tgaacttaga 300  
 gtccctatca ctaacaatga ttcttgga accatggagt atcacaatct cccttgaaaa 360  
 caaattagcc acatgggaag cgtcatcaaa ctttttacat ggaataaat 409

<210> 4702  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<400> 4702

atatgtatat aaaatgacat aacaaagcta ctaaaaatct aaaacataga ttaacactaa 60  
 tagaaatcag agactagaaa gagcagtaaa aaggtaaate acctttggag gtttaattcc 120  
 aactcgaagg aagagctcag gattcattat aggcagttca attgactccc tcaattccct 180  
 gatctgatca gataagccac caacagctga gtagctgata ttaccaggat cttcatgcaa 240  
 catattgtaa actactggat caacctggca actccaacga caaagaatta gagacaatag 300  
 tgaccaccag ggatccaata aatcagatct tagcacaaca ggaaaagaac atgttcataa 360  
 aatgaaaata ttaaaataat aaactacgac ttacttctcg aggaagagct cgcattatgg 420  
 tgagtgttgt catatc 436

<210> 4703  
 <211> 477  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4703

atctctaagc acctgcggca tgcaagcttc tgcaattaat tntcattaca atgctaacat 60  
 ttcttttctt caattttaac tgatagttga agtaggaata atccatttat catactctaa 120  
 atatgcttag cattaatgtg acgaagaaat gtctccttgc agaaggttgg tgtcctgttt 180  
 ttgcaacaag tcagggtcgt ccttgaacta tgaatttaat ttctgatata ttgtgcataa 240  
 accttcatgt aatgcagttt ttactggctg gtatagctaa ttaatttgat tcaatacttg 300



acagattcac aaagtattgc agcgggcaac tatggactgc agttctcaag ttgtggcgat 360  
 attccaggtt ttagagacaa cggaatcacc acctacctat tgttgcacaa acaaattcac 420  
 ttcttctcaa gaaattggtg atgcctatgg gtaatttacg tagacctcag catgtgc 477

<210> 4704  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4704

ccttgtatat gcataacatc aaaatcgata ngatataggac aatcatcaaa gatgaccatc 60  
 tcgaatttac ccatgaattc tctcaaaaaca tggttcatta atctcataaa attgcttgggt 120  
 gcataagtca aaccgaaagg cataaccaac cattcatata atccatgttt agttttgaaa 180  
 gcggatttcc attcatctcc ttctttaatc cttatttgat agtaaccact tttcaaatca 240  
 attttggaagaa agaacaagca ccatgcaatt catcacgcaa atcattaagt ctacgtattg 300  
 gataacctata tttaatggca atattgtgtg aagctctaca catcggagca cattctccag 360  
 aaccatgtct ctttgaaccc aattccccga cagcacatgg acta 404

<210> 4705  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4705

agctntgatn ggtttgagaa gaaatcacat gtttgtcatc atcaagaagg gggagaatgt 60  
 gaatgtatgt atacatgatt ttgatgatgt caaaagaaga atcaaacaag gctcattttg 120  
 cttcaagatt aatacaagat tgtttcaaca aacagagcct tgattcgaga tttcttcaag 180  
 atcaagcctt gcttcacaat gagaggtttc aagtcattca aggcacatgt aatcgattac 240  
 caatacatgt aatcgattac caatggtttg aaagtgtgta atcgattaca catcatatgt 300  
 aatcgattac cagagactct gaacgttgag aattgaaatt ttaaatgaag ggtcacatct 360  
 gttcaagcat aataattgtg taatcgatta cactaatttt gtaatcgatt accagagcgg 420  
 attttcaagg aatatcgcca acagtcacat cttt 454

<210> 4706  
 <211> 358  
 <212> DNA  
 <213> Glycine max

<400> 4706

cagctattct tgggtgggttg atgtactcta tctcgcagaa tggcatgata actggcagac 60  
 atagtcataa tcaattcact tgcctcttta gggattctca actttatctt ccctcctgct 120  
 gaagcatcta acaactgctt gggttgcggt ctcagcccat ctataaacat gttcaataga 180  
 attggctcag agaatccatg tgtaggagtc tttcttaaca aacctcgaaa cctctccaat 240  
 gcttcactca aagactcatc atggaatggg tgaaatgatg aaataacaac tttcccttct 300  
 gcagtctttg actcggagaa gtatttcttc agaaattact caacaacttc ctcccacg 358

<210> 4707  
 <211> 348  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4707

tttcatcgta attctgggca tgtacaagag ccgtgggtat gcatcataa ctttttttaa 60  
 tgtgcttgaa taaatattcg acggacattg attgattgca ccattctatg ttgaggtgag 120  
 cctgatattt caacaataag attggattgt atgggtaccac gtatctatcg tctanggtta 180  
 ttccattttt atctatatcc ttactatcat tatgccttnt ataaatagga tattcctctt 240  
 gctcaacaac agtttcaggt ngctttttct ttgaaaacat ctacaacatg tttcatgcat 300  
 ggcgactctc tatttgcact gacacatgaa tcatgcatat acgattct 348

<210> 4708  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4708

agctnttgcc caatgaactt ttcttgacaa agcatatggt gaacaaaaac tcttagaaag 60  
 atgttaagaa taattttctt gaaattcgtg tcatggtcac gtattatagc catttgatgg 120

ctcttgaaga aaccatgtta aaagttgtga ctcttgga tttcttcaaa atcagtcact 180  
gataatcgat taccataatg gtgtaattga ttacacagtt tattttatca aaggttgtga 240  
ctcttcatgt tgaggtttga aatctaacgt tcagaatcac tggtaatcga ttacaaatat 300  
tgtgtaatcg attacattat tttgaaaata cttttgaacg ttacaagaca atggtaatcg 360  
attgcatgcc catgctaatac gattactact tggttaatca attataaaac t 411

<210> 4709  
<211> 363  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4709

naagctatgc tgcanacatt tacaatagac ctctcaacc ttagcagcaa aatcaaccac 60  
agcagaacaa ttatgacctc tncagtaaca gatacaacct tggatggagg aatcacccta 120  
atcttagatg gtctagccct taacaacaac aacagcagcc tgctctttct tccaaatggt 180  
gctgccaag cagacatata ttctcacca atcaacaaca acacagcccc agaaacagaa 240  
acagtgcgc tctcgaaact tctcgagaa cttggagcaa tgactatgca aaatgcattt 300  
aacagagaca gacctcatca gagttactaa tagatgacaa tgctacacat aatcatacag 360  
tcc 363

<210> 4710  
<211> 311  
<212> DNA  
<213> Glycine max

<400> 4710

agcttgaag gtagtcttac ctcaaaata tatatatgta tgtttagggt tcttgatacc 60  
ttggatatgc atgtatgtgg caaaaaatac ctcaaatat atatatgtat gtttaggtaa 120  
cacgatacct tggatatgca tgtatgtggc aaagaatacc tcacaatata tatatgtatg 180  
tttaaggagc aagatacctt ggatatgcat gtatgtggca aaaaatacct cacaatatat 240  
atatgtatgt ttaggtagca agataccttg gatatgcata tatatagcaa aaatacctca 300  
caaaaatata c 311

<210> 4711  
 <211> 132  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4711

gctctcgaga aattcaaag gtcatttact tatcacacct aagttttatt cangcgcata 60  
 atataccgag acgctcgaaa ttgaacaacg gaagctctcg agaattctaa tgggccttac 120  
 ttatcacacc aa 132

<210> 4712  
 <211> 322  
 <212> DNA  
 <213> Glycine max

<400> 4712

actagctatg tgacatttgg agatggctct aaaggaaaga tcattggaat gggaaagcta 60  
 gtccatgatg gaccttctaa tctgaacaaa gtactgctgg tgaagggact gactgcaaac 120  
 ctgatcagca tcagtcagtt gtgtgatgaa ggattcaatg taaacttcac aaagtcagaa 180  
 tgcttggtga caaatgagaa gagtgaagtc ctaatgaagg gcaggagatc aaaggacaac 240  
 tgttacctat ggacacctca agataccagc tactcctcca catgtctatt tctccaagaa 300  
 gatgaagtca gaatatggca tc 322

<210> 4713  
 <211> 304  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4713

gagcgtctcg atatattacg ggactctatc atacatccga gtaaaaagtt atggccgntt 60  
 tgaatggctc agagggttcaa aattcaattt cgagcgtctc gatatatattc gggactcaat 120  
 cagacatccg agtaaaaagt tattgccgtt tgaattggct cagagggttca aaattcaatt 180  
 tcgagcgtct cgatatatta cgggactcaa tcagacatcc gagtaaaaag atattgtcgt 240  
 ttgaattggc tcagagggtc aacattcaat ttcgagcgtg tcgatatatt actggactga 300

atca

304

<210> 4714  
<211> 348  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4714

ctgcagcttt gagccattct acgatataac tttttatctc gatggccgat tgagtctcgt 60  
aatatatcga cacgctcgaa attgaatggt gaagctctag gcctattcaa acaacaataa 120  
cgttttactc ggaagtnega ttcagtgcgc taatatatcg ggacgctcga aattgaatgg 180  
tgaacctctg agccaactca aacgacaata actttttact cggatgtctg attgagttcc 240  
gtattatata gagacgcttg aaattgaatg ttgaacctct gagccaattc aaacgacaat 300  
atactnttac tcggattggt gatggagtcc cataatatat cgagacgc 348

<210> 4715  
<211> 288  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4715

gctctcgaga aagttttatg gttattactn ttcaaacgca agtctgatta aggtgcataa 60  
taaactcgaga agcttgaaat tgaacaacgg aagctctcga gaaattcaaa tgggcattac 120  
atatcacacg gaagtccgat tcaggcgcct aatatattga gacgctcgaa attgaacaac 180  
gaatgctctc gagaaattaa aatggtcata acttgtcaca cggaagtctg attcaggcgc 240  
ataatatatc aagacgctcg aaattgaata acggaagctc tcgagaaa 288

<210> 4716  
<211> 389  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4716

agctntntca aaatccactt taaacaccaa gcacaatttc ttagcctnc tatectnctc 60  
aacaacctta ttagcaatca agactccatg caacaactgt ctacccttaa caaatgctga 120

ctgtctttca tcaacaaagt gattcaatac cttactaagc ctattagata ggacttttagc 180  
aataattntg tagacacaac ctatgagggga tatgggtctg aaatcactta tatgtcgagg 240  
atccttgagc ttaaggataa gagcaatgaa tgatgaattg aggcccttag gaaaagcagc 300  
attcacatga aattctgcca aaaaccttaa gaaactcaag ttcagctcat tccataaatg 360  
cttaataaat atgaaattaa acccatctg 389

<210> 4717  
<211> 214  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4717

agtgcctngaa agaatcaatg acantgcttt actaagtgag ctgcccgggtg agtataatgc 60  
tagttccacc ttcaatgtct ctgattttatc tctttttgat gcagatggag aatccgattt 120  
gatgacaaat ctttctctag agggagagaa tgatgacgac atgttcaaaa gcaagggcaa 180  
cgatccactt gaaggacttg gacgacctat gaca 214

<210> 4718  
<211> 208  
<212> DNA  
<213> Glycine max

<400> 4718

tcagatatct taagaagggg ggggtgaatta agatattacc aactatttcc ccgattaaaa 60  
ttctatttca ctttctattc aaggtacaaa ttcccttaat aatgaacttc ttaaattattg 120  
attcaaatag aaaaatttgg atattaatat taaaccaata ttaattaaag agtttttaggg 180  
aagagaaagt gccaaacttag atttatat 208

<210> 4719  
<211> 293  
<212> DNA  
<213> Glycine max

<400> 4719

ctcagctgga ttcccttagt agggaaatcta ttcttcctaa gatgggtcca aaccagtc 60

ccctcattaa gaactagctc ttttcttctt ctattgcctt tagttgaata caccttttgg 120  
 tgattcteta tttggttctt aaccctctca tgcattcttct ttacaaattc tgacctagat 180  
 tcccccttctt tatgtataaa agaagtgtcc agtgggaggg gaatgaggtc taacggtgtt 240  
 aggggattga acccatagac aacctcaaaa ggggactgct tgggtggttct atg 293

<210> 4720  
 <211> 328  
 <212> DNA  
 <213> Glycine max

<400> 4720

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 tttcactttt tactcaaatt atgaatttcc ttaatgacca tcttccttaa tatttattca 120  
 gatgaagcaa cttgaatatg aatataagcc ataataaatc aaggagatta acggaagaga 180  
 aaatgcaaac ttcagtttat actggttcgg ccacaccctt gtgcctacgt ccagtcccca 240  
 agcaaccgcg ttgaaagtgc actatcttgt aaattctttg acagttctaa cacacaggac 300  
 aatcttcttt gtgttagaat ccttacac 328

<210> 4721  
 <211> 465  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4721

tcctcgtggt ttctttgaga agctntctca agaagcttct tttagaagct agatccttat 60  
 ctatccacac ccctctatta actaaattaa cttccttaaa aataattatg gatgaaaata 120  
 acgcaacaaa taatcaaaca tcaaataata ttactatata tatatatata tatatatata 180  
 tatatatata tatatatata tatatcaggg tgttacaact ctcccaccct tttagaaatt 240  
 tcgtcctcga aatttacctt actcaaaca ggatgggtga gcttctcgca tctgactttc 300  
 taattcctac gtggcatctt ctctgatgc acctccccag atcaccttga ccaacggaat 360  
 ctcttttctt cttaagtgtt tggtcgcta tcctcgatcc tcaaaagcaa tggttcatat 420  
 gtcaaattct ccttcacttg tacatcatcc aattcaatca catgg 465

<210> 4722  
 <211> 305  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4722

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 caaaciaaagg ctataggacg actgcgtgaa agtataagtc ctgcaagtgg aaagggaagc 120  
 aagggaagg gtgatcgatt cattacacag agaagcaatg atgtggatgg ataggttctc 180  
 ctttactgaa attctgatac tggggacaga tgtcctacag gatgtcacga catcgcgctt 240  
 cataacatgc agcttgata tgaccgtatg aacagattaa acaagtntat aacacaagag 300  
 aattg 305

<210> 4723  
 <211> 427  
 <212> DNA  
 <213> Glycine max

<400> 4723

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 ctattttcag attgggaatg cctctaacag cacctctgtc aatgattatc ttcatgcctc 120  
 ttaagtgcag atgtccgaat ctttgatgcc atattctgac ttcattcttct ttggaggata 180  
 gacatgtgga ggagtagctg gtttcttgag gtgtccatag gtagcagttg tcctttgatc 240  
 tgctgccctt cattagaact tcactcttct catttgacac caagcattct gactctgtga 300  
 ggtttacatt gaatccttca tcacacagct gactgatgct gatcaagttt gcagtcagtc 360  
 ccttcaccag cagtactttg tccagactag gaagtccatc atgaactagc tttcccattt 420  
 catgatc 427

<210> 4724  
 <211> 425  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4724

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ctattntcag attgggaatg cctctaacag cacctttgtc aatgattttc ttcatgcctc 120  
 ttaagtgcag atgtccaaat ctttgatgcc acattctgac ttcattcttct ttggagaata 180  
 gacatgtgga tgagtaactg gtttcttgag gtgtccatag gtaacagttg tcctttgatc 240  
 tgctgccctt cattagaact tcactcttct catttgtcac caagcattct gactttgtga 300  
 agtttacatt gaatccttca tcacacaact gactgatagc tgatcaagtt gcagtcagtc 360  
 ccttcaccag cagtactttg tccagactag gaaagtcac atggactagc tttcccatc 420  
 agtga 425

<210> 4725  
 <211> 359  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4725

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 tgctttgctg atggcttctt ctctgttccaa gcttcaattg gagtcttggt tttactgact 120  
 tagttggaca tctctgtagt atgtaaacag cagtgtagac tgcttcagcc cagaatgtgt 180  
 tatgtagtcc cttttccttg agcatcgatc tagccatctc cataattgtg cgattctttc 240  
 tctcgacan ctccatttgt tgaggagaat atgcgactgn taagtgtcgc tcaatgcctt 300  
 catccttaca aaatctttca cactcacgag aggtgtactc tttgtcgca tcacttctt 359

<210> 4726  
 <211> 299  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4726

agcttggnta tctccttctt tactacatca agaatcaccg ggttgagtct tctctgtggg 60  
 tgtcttactg gtttagctcc atcctctaaa tttattcgat gcatacatgt ggatgggcta 120  
 ataccaggaa tgtccgccag ggtccagcct ataaccttct tatgcttctt gagaactgac 180  
 aacaacttct tctcttgctc atcagcaagg gaggcagata taatcactgg aaaactcttg 240  
 ctatcatcca agtaagcgta ttttaaattt gatggcagaa gcttcaattc tgggtgtggt 299

<210> 4727  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4727

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 gatattcttaa gaaggggggg ttgaattaaa atattccaaa ctacttcccc aattaaaaat 120  
 ctatttcact ttttattcaa gttatgaatt ccttcaatga caatcttctt aaatattgat 180  
 tcaaataaaa caatttgaat atgaatataa agcaataata aataaaggag attaagggaa 240  
 gagaaagtgc aaactcagat ttatactggg tgggccacac ccttgtgcct acgtncagtc 300  
 cccaagcaac ccgcttgaga gttccactat cttgtaaatt ccttttataa gttctaaaca 360  
 cacaaggaca atccttcctt tgtgtttaga attcctttac aacaagagac tcacgggtctc 420  
 ttaatccctt agagaatg 438

<210> 4728  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4728

gcttataata tatcgatacg ctcgaaattt aacatcagaa actctctaga tattcaaagt 60  
 gtcataactt ttcacacgga tgtgcgattc gggcgcataa tatcgcgagg ggcttgaaat 120  
 tgaacaacgg aagctcttga gaaattcaaa tggcatagc ttctcacacg gatgtccgat 180  
 tcgagcaaat cacatatcga gacgctcaga attgaacaac ggaaggtctt gagaaatata 240  
 aatgatctta acatttaact cgaatgtcca attcaggcgc atcacatata gtgacactcn 300  
 gaattgaaca acggaagctc tcgagaaatt caaatggcca taactnttca cactgatgtc 360  
 cgattcacgc ctataatata ttgatacgct cgaaattaac atcgaagctc ttgagatatc 420  
 aatggcata actttcacat gatg 444

<210> 4729  
 <211> 389

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4729  
  
 agcttctcga catatgatgc tctcgaatcg gacatccgng tgaaaaggta tgaccattta 60  
 aatttcgcga gagctttcga tgtttaattt cgagcgtatc gatataattat aagcctgagt 120  
 cgtacatccg tgtgaaatgt tatgaccatt tgaatttctc aagagcttct cgtgttcaat 180  
 ttcgagcctc tcgacatatt atgcgcccga atcggacatc cgtgtgaaaa gttatggcca 240  
 tttgaatttc tcgagagctt ccgatgttta atttcgagcg tatcgatata ttataagcct 300  
 gaatcggaca tccgtgtgaa aagttatgac catttgaatt tcacgagagc attcgttggt 360  
 caatttcgag cgtcactata tgtgatgcg 389

<210> 4730  
 <211> 337  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4730  
  
 cttgagccaa ctcanacgat aataactttn tactcggatg tctgattgag tcccgttaaca 60  
 tatcgagacg ctcgaaattg aatgttgaac ctctgagcca attcaaacga caataacttt 120  
 tttcacggat gtctgattga gtcccgtaac atatcgagac gctcgaaatt gaatgttgaa 180  
 cctctgagcc aattcaaacg acaataactn tttactcgga tgtctgattg agtcccgtaa 240  
 catatcgaga cgctcgaaat ngaatgttga agctctgagc caatacaaac gaccatatac 300  
 ttttactcgg atgtctgatt gagtccccga acatatac 337

<210> 4731  
 <211> 422  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4731  
  
 tcaacaaagg ggagatggac catttcaagt gnttgaaaga atcaatgaca atgcttacia 60  
 agttgagctt cccggtgagt ataatgttag ttccaccttc aatgtctctg atttatctct 120

ttttgatgca gatggagaat ccgatttgag gacaaatcct tctcaagagg gagagaatga 180  
 tgaggacatg accaagagca agggcaagga tccacttgaa ggacttggag ggcctatgac 240  
 aagggctaga gcaaggaaaag ccaaggaagc tcttcaacaa gtgctgtcca tactatttga 300  
 atacaagccc aagtttcaag gagaaaagtc caaggttgtg agttgtatca tggcccanat 360  
 ggaggaggac taaatggcac cactttgtct caattttaga gtggttagtt tttctaaata 420  
 at 422

<210> 4732  
 <211> 393  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4732

tcaagaaaaa gatggcctca acaaattcct tatttccaga atggaattct atcaatagac 60  
 ctccaatctt taatggagag gggtaccact actggaaaac ccgaatgcaa atttttatcg 120  
 aggcaataga tctaaatatc tgggaagcca tagaaatagg gccttatata cccaccacag 180  
 tagaaagagt ttcaatagat ggtagttcat caagtgaag cataaccata gaaaaaccta 240  
 aagatagatg gtctgaagag gatagaaaac gagtacaata caacttaaaa gccaaaaaca 300  
 taataacatc tgccctagga atggatgaat atntcacggt ttcaaaatgt aagagtgcta 360  
 acgaaatgtn gaacactctt cgattaacac atg 393

<210> 4733  
 <211> 428  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4733

agcttgcgca acanatatatt aattgttgcg tgatcagtgt aatcactat cattgatccc 60  
 actagataag atcgaaattt ctcaagtgca aacataattg ccaacaattc tttctcaatg 120  
 gtggcatagt taatctaagc atcattcaaa actttgctag cataatatat ggtatgaaac 180  
 attctgctct tccgctgccc caacacagca cctactgcat aatcacttgc atcacacatc 240  
 aattcaaact cttgtcccca gtctgggtgct gtaatcatag gagcagaaac caatttggct 300

ntgagagtgt taaaggcttc taaacattct tcattaaaca caaacacaac ctccttggtc 360  
aacagatngc ttanggggtt aagcaatttg gagaagtctt taatgaatcg ccgataaaat 420  
ccaacatg 428

<210> 4734  
<211> 454  
<212> DNA  
<213> Glycine max

<400> 4734

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ctactatcca gcatgccctg aacctgaatt aactatgggc gctgccaagc acacagatgg 120  
taacttcatg actttacttc tacaagacca aattgggtgtt cttcaagttc ttcacagaa 180  
tcaatgggtc aatcttcttc cagtacatgg agctcttggt gtaaactag gagaccttct 240  
acaggtaaat attccaagtt attattctca atcgtagat tatgcatttt agagcttact 300  
tttaagttaa aatgtgtttt aggttcttaa tgaatcttag agcttacttt ctatgacaag 360  
tgattgattt ttcttctaga tatctaatac agtgtgtcgt acaatctatt cattatatat 420  
ggaaagtttc gtttgagtcg atgttgact taaa 454

<210> 4735  
<211> 470  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4735

taagaaatct atgtatgggt taaaataagc ctcccgtcag tggtagctta agtttcatgg 60  
gataatttcc tcatttggtt ttgatgaaaa ccccatggat caatgcatat accacaagat 120  
tagtaggagt aaaatatggt ttcttggttt atatgtagat gatattttac ttacagccaa 180  
tgatccgggt ttgctacatg aggtgaaata atttctctct aagaattttg acttcaagaa 240  
tatgggtgat acatcttatg tcattgacat taagattcat atagatagac ctgaggtat 300  
tttaggtcta tcacaggaaa cctatattaa caaaattnta gagagatttc ggatgaaaga 360  
ttgttacta agtgttgctc ccattgtgaa gggatgtagg tttaatttga accaataccc 420  
acagaatgac tntgagagag aacatatgag aaacattcct tatgcttcac 470

<210> 4736  
 <211> 334  
 <212> DNA  
 <213> Glycine max

<400> 4736

agcttctaaa ctctgtacaa gaatgaagct ctgataccac tggttataca agtggcctca 60  
 gatattcttaa ggaggggggg ttgaattaag atattccaaa ctgtctcccc taataaaaaa 120  
 tctatttcac tttctactta ccttatgaat tcccgtagt gacaatcttct taaatattaa 180  
 ttcaaacaaa gcagcttgaa tatgaatatg atgcaataat gcatgaagga gattaatgga 240  
 atagaaactg catactcagc tatatactgg ttccgtcaca ctcttgagcc tacatccagg 300  
 cccaagcaa cccgcttgag agaacactat cctg 334

<210> 4737  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4737

catgcaagct tcgtgatctt ggacaagagg gttntatgtt agcacatgca ccttattatg 60  
 aaaaattaga aactgagttc aagaagccat tgtatctcgg atgcgcaaac ttcacacgat 120  
 tatcgaaggt gttagctntg gtgaatttga aggcaagatt tgggtggagt gacaaaagct 180  
 tcaatgaatt acttttggtt ttgaagaata tgcttcctat ggataacacg ttaccaaga 240  
 atcattatga ggccaagaag aatttatgtt cagtgggtat ggaataccaa aaaatacatg 300  
 cttgccctaa tgattggtat ttgtatagaa atcagtttac acaaatggcg cactgcccta 360  
 catgtgngt gtcatgctac aaagtgaagt gatgatgcaa ccacatacaa ggatcg 416

<210> 4738  
 <211> 384  
 <212> DNA  
 <213> Glycine max

<400> 4738

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atggtatcat cgcgaaactg aagaatattc actgggacct tgttcttccc taccataaag 120  
 ctgtgaaata agattctgga cattgcttcc ctcatcaatc ctagtagccc ttcagcagcc 180  
 aagacaaata aaagaggggc caagggatcc ccttgtctca atcctctttg aggcttaaat 240  
 tcttcagttg gacttccatt tacaagaatg gatattgaag ctgatgagag gcaaccttta 300  
 acccaactaa tccatttttc gtggaacccc attcttctca tcatataaaa gatgaattga 360  
 caggccacag aatcataagc tttt 384

<210> 4739  
 <211> 358  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4739

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 gggtatttct tcattcagct ttgaagagaa tgtcatggat cactgtatat actagaaggt 120  
 cagtgggagt aagatttgtt tcttgtatt atacatagat gatattctac ttgcgactaa 180  
 tgataagggt atgctatatg aggtgaaaca atttctctca aagaactttg atatgaagga 240  
 tatgggagag gcatcttatg tcataggcat aaagatccat agagaaagat ctcgaggcat 300  
 tntaagcttg tctcaagaaa cctatatcaa caaagtttta gagagattta acatgaaa 358

<210> 4740  
 <211> 312  
 <212> DNA  
 <213> Glycine max

<400> 4740

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 cagagtgtg atcttatgaa ctctgattct tctatctgac cgaatgaagt gatattctaac 120  
 atctatatgc ttggttctat catgatgaac ctgatccttg gccaaagcata tagcactaag 180  
 gctatcacag tagatgttag catattcttg attaattctg agatcattta tcagacctct 240  
 tagccaaatt cctttctttg cagcttcagt gagagccata tattcagcct cagtagttga 300  
 gagggcaaca aa 312

<210> 4741  
 <211> 473  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4741

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 tgcttccaga gtttcatggc cttgcaggtg aagaccaca caaacatctg aaagaattcc 120  
 atattgtttg ctccaccatg aaacccccag atgtccagga ggatcacata tttttgaagg 180  
 cctttcctca ttcttttagag ggagtggcaa aggactggct atattacctt actccatggc 240  
 ccatcacgag ctgggatgac ctcaagagag tattcttaga aaaaaatttc cctgcttcca 300  
 ggaccacgac catcagaaaag gatatttcag gtattagaca attcaatgga gagagcctat 360  
 atgaatactg ngagagattt aaaaagttat gtgtcatttg cccgcaccac caaatttcag 420  
 agcagcttct tctccaatat ttttatgaag gactcagtaa catggagaga agt 473

<210> 4742  
 <211> 470  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4742

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 gttggacatc tgttgagtac gtaaacagta gtgtagactg cttcagccca gaatgtgtta 180  
 ggtagtccct tctctttgag catcgatcta gccatttcca taattgtgcg attctttctc 240  
 tcggacactc cattttgttg aggagaatat gcgactgtaa gttgtcgctc aatgccttca 300  
 tcctcacaaa atctttcaaa ctgcgagag gtgtactctc tgccgcatc acttcttagt 360  
 acttttatcc gttttccact ttgattttca gcaagggcct tgaacttttn gaatactcca 420  
 aagactactg attttctttt agaaaatata cacatgtcat tctagagaag 470

<210> 4743  
 <211> 366  
 <212> DNA  
 <213> Glycine max



<223> unsure at all n locations  
<400> 4743

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agatgatggt actgcgggtg aacccaaaagc tgcagtttct tttgggtgagg tagccatgga 120  
agagcagagc gtttggaatg atttcgtaaa tctcagaaaag ctattgggaa atgctggaga 180  
aaacacgaat gccaaagcaga tataaatttg aatgaagaat gtagaggggc gtgtgaagca 240  
acggtcgaat ttgctttgta gtgaacgtgc tattaatgtt aagtgattcg tttgggcacg 300  
ttcagattgc agtagctgct ataattcctc tagcagacaa atgcccagct tgcccctcag 360  
tttttc 366

<210> 4744  
<211> 444  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4744

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aagagaaaact ctgcgtgatg atcttgagct ccgagagcga aaacacatgc aggttagacc 120  
ccactagaga aacggagaga tcctccgaaa gcgttgagcc agggaaactc aagtccgtta 180  
tagagaccct gttggaagaa gaaccaccct ttgtagccac cactttgggt ggcttcggag 240  
aaggtgacac agactcacc tcataacaac tagagaagct cgatcccatg tgaattatct 300  
ttaatctatt aagtcctatg ctgcacaagt atctatgttt ctataggaag agagatatgt 360  
tngatgaacg tttataagta gatgggaaat gattggagat gatgtggttg aagattttaa 420  
aggggtagca tatatataaa atct 444

<210> 4745  
<211> 387  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4745

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actatagcct catttatggc gctaaactgt tgggagtcgg aagccatctt ctcaattaaa 120  
 ttcttggtt caacaggggt catgtcttca agggctccac cactggcagc atctatcata 180  
 cttctctcca tgttactgag tccttgataa aaatattgga gaagaagctg ctcagaaatc 240  
 tgggtggtgag ggcaactggc acatagtntt ttaaattctt cccagtattc atataggctc 300  
 tctccactga gttgcctgat gcctaaaata tcctttctaa tggtcgtggt cctggaagca 360  
 cggaaaaagt ttctaanaat actctct 387

<210> 4746  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<400> 4746

taagctcctt caactgcaca aggtctttaa tatttgaaga gtatccttgt ggaaccttca 60  
 cccgacgaag aactgacaa aaacttatct tctcattctt ggacaaagta tggcaagctg 120  
 ggggcaagta aattttcttc ccatcagacc ttggatgcaa ctgtgatcgt ataccatata 180  
 cagctagatc ttgacgggta ttcaagccat ccttcattct gccttgaatg ttaaggagcg 240  
 tcccaatcac actgtcacia acatttttct ccacatgcat aacatcaata caatgtctaa 300  
 cgtcaagatc ataccagtac ggaagatcaa agaaaatgga cctcttcttc catatgcaac 360  
 tctaacttt 369

<210> 4747  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4747

cttgatggtg tcgagaagaa atcacatgtn tgtcatcatc attaaagggg agaatgtgaa 60  
 tgtatgtata catgattttg atgatgccaa agaagaatct aacaaggctg cttcaaata 120  
 taagcatttg cttcaagaat aattcaagat tgcttcaaca aacaaagccc ttgtttcaag 180  
 attcactaaa gaccaagcct tgccttaaaa caatgtgctt tcaagacatg caaggctctg 240  
 gtaatcgatt accaggaagt gtaatcgatt accagaagac aggggttgaga aatagctggt 300  
 gaaaaagggt ttgaatttga attttcaaca tgtaatcgat taccatatgt ctgtaatcga 360

ttaccagcaa cgaaactttg gaaattcaaa ttcaaaagtc ataacccttc aaattataat 420

tgtgtaatcg attacacaaa cattgtaatc gatt 454

<210> 4748

<211> 459

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4748

tcaatatctt acgtccatta tagaatatac tagtggtttc cgtatattaa aagtaaactt 60

agtaattttt ctttaaactt actaatattt taaaaccatc agagtaaaca atgaaaatga 120

taaaacttgg ggcgaaacta tatatgaacg aatgtgaaat atgaacaaca tgtttcataa 180

agcaagttaa atattatcat gctaaaagtg gcgatgtctt gtcccaacta ataattaatt 240

ttctgaaatg ttttatttac tgtaactttt gtttcaattg gcatctttnt ttattttgag 300

agagaatatt tttaaaatag tagtgaataa aaaataagtg caaataaaga taaaaacaca 360

cacaattntg catacattat taattatnta atgttcaaat aattttcatg acacttgatg 420

gatgatacaa acatatacat acattgaaac aaaaacatg 459

<210> 4749

<211> 428

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4749

catgcaagct tgtaacttat ataatatata cattntattg taattatatt ttaacacatc 60

agaatggtgc gcctataacc cacaggtecc aggatcgaaa cctgggttctg ataaagagtg 120

gcttccgatc tatcacatat atatatattn tatgcgtaaa acatatatca ttacgcaatg 180

acatttgagt ataataaaaa atagttctgc agggcctaac atttcagtgc ttatattaat 240

ttagttacca tttaaatttt attattgagt caactttnta acgtatatte atattttctc 300

tttgtttaatt ctaatttaaat ttgtttaagt aaacatatct tttatggata ataatggctt 360

ccagtttctt agtgaaccac atctganaaa ttatactcga acaagaagat gtgtttcact 420

atgttcat 428

<210> 4750  
 <211> 418  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4750

catgcaagct tgtnttcatt ntccttgtct acaaaggctt aaagatggtt tcattcattt 60  
 aaaggtaaca gtcttaagac ttgtgatgac gtgggtgaaa aattcttgaa gaaatacttc 120  
 ccagagtcca agaatactaa aggaaaagct gccatctcat cctttcatca atttccagac 180  
 gagtccttga gtgaggcttt gaaaagattt catgggttac taagaaagac acctactcat 240  
 ggattttcag aaccaatcca actcaatatt ttcatgacg ggtaaatgcc acaatcgagg 300  
 tagcttttag atgcttctgc aaggggaaaa ataaaattga agaccctaa agaagccatg 360  
 gaattaattg agaatatggc tgctagtgc catgcaatct tgcgtgatag agcacaca 418

<210> 4751  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4751

tgtttctcat atcaaggaat caactataat tcctgttctt gttcatgctg gtaatgttct 60  
 tccatataaa tntcatattc tgtagttagt atataggctn tattttttga atttgttcgt 120  
 ttcatatgc agatggaatt tgtcatgtat atgttgacaa gtctgctaatt attgatatgg 180  
 caaagcagat tgtagggat gcaaagaccg attatcctgc agcttgcaat gcgatggtaa 240  
 ttagcattta cacatccttt gcaatgcact aaataaaaca tgtaaatctg tatcctcctc 300  
 tcctnnttgg gtttactgaa ttggtaggtg tgatgttatt ggaattatgg actatgctca 360  
 tcaaaatatn nttgtttggg attctaggan actcttctcg tcacaaggat ctgtcaataa 420  
 tgggtggactc atga 434

<210> 4752  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4752

agctntactt caatatntc catatcatca agtaatttgt tgaaatcagc caattgttca 60  
 gtggttgttc ttgactctgt catcttgaag gtgtacagtt agtgcttcaa gcatagccga 120  
 tntgcaaggg actttgtcat atacaatgac tccagtttca gccacattga ggctgttgtc 180  
 ttttctcttg caacttctct taaagcttta tctccaaggc ataaaatgat tgcacttctg 240  
 gatttagcaa tcactctctga tttctccttt gagcttagag aatcagacat cttttcttct 300  
 cctttaagag cttctgcaca gccatgttga atcaaaaatg ctncatcttg attctcataa 360  
 cccgagtcac tttccccttg aaactctcta tate 394

<210> 4753  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4753

tganatngaa caacagaagc tctcgagata ttcaaattgt cataacttat cacatggaag 60  
 accgattcaa acgcataata tatcggaag ctcgaaattg aacaacggaa gctctcgaga 120  
 aattcaaatt gtcataactt atcacacgga ggtccgattc tggcggatag tatatcgaga 180  
 agtcataat tgaacaacga aagctctcaa gaatttcaaa tcgtcataac ttttcaaacg 240  
 gaagtccgat tcaggtgcat aatatatcga gaagcttgaa tttgaacaac ggaagctctc 300  
 gagaaattca aatggtcata acttttcaca cggaagtccg attctggcgc ataatatatc 360  
 gagacgctcg aaattgaaca acagaagctc tcgagaaatt caaatgggtca taacttttca 420  
 cacggaagtc cgattcaagc gcataatata tcgag 455

<210> 4754  
 <211> 158  
 <212> DNA  
 <213> Glycine max

<400> 4754

agcttctcga tacattatcc acctgaatca gacttccgtg tgataagtta tgaccattta 60  
 aatttcttaa gagcttccgt tgatcaattt cgagcgtctc ggtatactat gcgcccgaat 120

cggactttcgtgtgataagt tatgaccata tgaattct

158

<210> 4755

<211> 339

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4755

ccaagctntg tgccaaccag aattatggtg acaccaggat cataatgctt caactccgga 60

atccactgaa aatgaaacca cacatgcaat ttatcatcga ctttttttat aaatgaatta 120

ttttcttaac atataacatg atccatacat ccttcattac aggccataca gaaaccttat 180

aattatcaaa ataaataaga agaaatacac ccaaaacact atgaccacaa taaattgcc 240

cgaagtacct ttttagagac attttcataa ctggccttgc ttatgagaga gagagccagt 300

atgaaaacat cggcaccacg ggaactcaaa ggtcttaat 339

<210> 4756

<211> 449

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4756

tcttattcac ataacaccaa tagtattcca ttataagca gtgattgacg attcanatta 60

catatttata agagaccaac caaacacaaa gcaaccacag cttaaaacac ccgtaacaaa 120

tcctagaaca tttgaatttg caaaggcggg ccatgaccac tttattctaa aacttcaaac 180

acaacacata cttattatattt attgatacat gtattacagc tatctctgct tgaaggttat 240

gcatgttgat ctcaattgca gctgcatggg tcgcaagtgc agtttgatcc acagttgcag 300

ccaccgttct cagctgcaac acccatttca gcaccctcga attgggcctt caccggccca 360

acacccaaaa ctagagtctc aattgtgac ttctcaacgt agtcaaaaga gtacttggtg 420

cacttgcata catgaaaaat aacatacat 449

<210> 4757

<211> 421

<212> DNA

<213> Glycine max

<223> unsure at all n locations  
<400> 4757

tccttacagt cacctcgagg catgcaagct tataaatata caccctntaa gaaagttaat 60  
taatatagtt agtagcatta aattgttaac tatntgtatt atttttgtca aaattattct 120  
taaaattatc ggaactcata attnttctct ttccacttaa ttactttccc acctaatata 180  
ttaatgggtg ctagtcttcc tatctaatac ttataagata ggtaatgcat ntatcttttt 240  
agtatataac atttattgta aaataattat gggatatttg gtcaaaaaat aattaatata 300  
aaagataact tgagaagact cttataagaa gggaacaaat aaaattgaaa aaagattatt 360  
atatctatgg atagagtggg tatgtccgag cactaagccc ctgtgaaac taatggcatg 420  
c 421

<210> 4758  
<211> 469  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4758

gtcacgaacg atgctgggac gattgtgaat gaacttgaag ttcagcatcc tgctgccaag 60  
gtgttggttn tggctgggaa ggctcaacaa gaggagattg nggatggagc taatttaact 120  
atttcatttg ctggggagct cctgcagggt gccgaggaac ttatcangat gggtttgc 180  
ccgagcgaga tcatcagtgg atacactaaa gcaatcaaca aggttttttc agtttttgat 240  
gaaagcctta gtgatctgtc tttaaatgtc atattgctgc tctctctccc tctaatttct 300  
tgttttgttt cagactgttc aaatattgga tgaactagtt gaggatgggt ctgacaatat 360  
ggatgttcgt gataaggaac aagttatttc aagaatgaaa gcagccgttg ccagcaagca 420  
atctgggtcaa gaagatatca tatgttcgct tgttgctgat gtgagtata 469

<210> 4759  
<211> 465  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4759

tcttacgtca cctgccgcat gcatgcttaa atacactcaa tgaacactag catataccga 60  
ataattataa attttcatac taatcttctt atatactatt tttgaaattt ccaagatatt 120  
aaacatatcc tttntttgtg tttatatatt caataaaata ttcgatcaga gaatttgtag 180  
aagaatataa ttaagattac tcttaatcca ccttatatat gtgcgaattc atttggatca 240  
ttaaaatatg ttacaacaaa aatgaaatat ttcaaggaaa tttatataaa attttgcaa 300  
gagttttatg anaatggtgc atataatttt ttctataaat atagatataa taaaccacag 360  
ttctttttgt acataaaatt tgtgttgctt taatttcgtg tgtgtntgtg gtgtatatat 420  
aatatcttga aatgtttcct taaaaaaata tcttgaaatg ttttt 465

<210> 4760  
<211> 409  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4760

ngatgttcgt cttcgtgcct ttatatgtgc cactcatact cttggagggg tttacatcta 60  
tagtaatcac caaggctgtg atggcagtcg cctttactat ggtaaaaaaa tacttttctc 120  
ttaatagaat gctattttgt acttttcaca tttgtcccat tgcatatcat caaaattagt 180  
ataagggcat tntaatttcc gcttagcttg tttatatattc atttacataa gattttttcca 240  
tattttctata attttatctt gcctttgcaa cagatggctg tgctagtgtg gtggtaaagt 300  
gagatagtgt cgctcagggg tcacaatttt tctttaaaag atgttgacgt tgtggttgct 360  
caaataaatc tagacgtggg atgtattgca tggatttcca tatatcaat 409

<210> 4761  
<211> 393  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4761

tccatcaata actnttcact cggatgtccg atcaggcgaa ttatatatcg agacacccga 60  
aattgactaa aggaagttgt cgagaaattc aaatgggtcac aactttttcac tcggatttcc 120  
gattcagcgc cataatatat cgacacgctc gaaattgaac aacggaagct ctcaagaaat 180



ctaaatggtg ataacttttt actcggatgt ccaattccgg catataatat ttctagacgc 240  
 tcgaaattga ataactgaag ctctcgggaa attcaaatgg tcataacatt tccgacagat 300  
 gtctgattca ggcgcataat atatcgagac gctcgaaatn taacaacgga agctcacgag 360  
 aaattcaatg tgtcataact ttcacacgga tgt 393

<210> 4762  
 <211> 420  
 <212> DNA  
 <213> Glycine max

<400> 4762

agcttgtgct tcaacaattg caacaagacc cactatccat aatgagagaa caattttttt 60  
 ttaaaacctt gcatctcgta tgaaatatgt tctctcttta ggtttgggtt aggtcagcgg 120  
 atttactccc aaggagcctt ctccaccatta gaagatcacc ttcttcatag ggtaaaccctc 180  
 ttcaatatgc tcatcaccca tggcttcacc ttcatttcca cttgaggaag gagaagaagt 240  
 agcctcctct tggctactat agatgtcttg acccctcata atcatgggtt tctttgtggg 300  
 ggtattgaga agcaatgtgg cctttcccaa tacatttaaa gcacttaatg ttactagtgc 360  
 tatcttatga actagccttt ggagtgattt cctctatgca tttaccctta tcatcctttg 420

<210> 4763  
 <211> 276  
 <212> DNA  
 <213> Glycine max

<400> 4763

agcttgtatg gttaaagact cacgattgtc acgtgctcat gcaacaattg ttagcccggg 60  
 ctatacgaga catctttcca aacaaagtca agttaaccat aactcgctg tgctttctct 120  
 tccatgctat atgtagctaa gtcattgate ctgtgaaggt tgatgagctg gaaaatgacg 180  
 ccgcaattat actgtgccag gtggagatgt attgttcccc tgctttctct gacatcatga 240  
 ttcacttgat tgtgcatcta gacagagaaa tcaaat 276

<210> 4764  
 <211> 307  
 <212> DNA  
 <213> Glycine max

<400> 4764

taagctcctt caactgcaca aggcctcttaa tatttgaaga gtatccttgt ggaaccttca 60  
cccgatgaag aactgacaa aaacttatct tctccttctt ggacaaagta tggcaggctg 120  
ggggcaagta aattttcttc ccatcagacc ttggatgcaa ctgtgatctt atacccatat 180  
caactagatc ttgacgggta ttcaagccat gcttcgtctt gccttgaatg ttaaggagcg 240  
tcccaatcac actgtcacia acatttttct ccacatgcat aacatcaata caatgtctaa 300  
cgtcaag 307

<210> 4765

<211> 306

<212> DNA

<213> Glycine max

<400> 4765

taataaatct atatatgggt taaaacaagc ttcccgtcag tgggttctctt atttttcatg 60  
ggataatttc ttcatttgggt tttgaggaaa accccatgga tcaatgcata taccacaagg 120  
tcagtgggag taaaatatat ttccttggtt tatatgtaga tgatatttta cttgcagcca 180  
atgatcgggg tttgctacat gaggtgaaac aatttctctc taacaatttt gacatgaagg 240  
atatagggtg tgcaccttat gtcacgcaca ttaagattca tagagataga tcttgaagta 300  
ttttgg 306

<210> 4766

<211> 318

<212> DNA

<213> Glycine max

<400> 4766

ttgagaaaat tcaaacgaca ataacttttt actcggatgt ctgattgagt ttcctaaata 60  
tatcgagacg ctcgaaattg aataccgaag cgctaagcaa attcaaacga caaaaacttt 120  
ttactcggat gtctgattga gtcccgtaat atatcgaaaa gctcgaatgt gaatgtagaa 180  
gctctgagca aattcaaaca acaataactt tttactcgga tgtctgattg agtcccgtaa 240  
tatatcgaga tgctcgaaat ggaataccga agctcggagc aaattcaaac aataataact 300  
ttttactcgg atgtccga 318

<210> 4767  
 <211> 357  
 <212> DNA  
 <213> Glycine max

<400> 4767

agcttgtctt ttctcttcag ttccaataat catatttacg agaattatga atttgaattc 60  
 tgcgaaggac atttgggact acctcaaatt agagtatcaa ggtagtgatc gaaccaaagg 120  
 tatgaaggta cttacttggg ctagagaatt tgagatgcag agcatgaagg agacagaaac 180  
 tatcaaaagt tatgctgaca aactgttgag tattgcaaac aaggtagctc tccttggtta 240  
 ggattttcct gacgaaagga tagtgcaaaa aatacttggt attgtacctg aaaaatatga 300  
 atctaaaata ttagcattag aggagtcaaa agacttgcca aatatcacc ttggaga 357

<210> 4768  
 <211> 356  
 <212> DNA  
 <213> Glycine max

<400> 4768

agcttttagat ttctacttta ttattaatac tcatgtcatc cttgagtaat cattgatgat 60  
 ggagaggaag taactttccc ctctagtaa tggaactctt gaaggccct agtagtcaga 120  
 atggacgtag tcctatatgg cctttgtagt gtgcatgaac ttttggaatt ttgttcgatg 180  
 ctacttccca tagacacagt gctcacaaaa ttaaagaggt tccaccttat gatttctag 240  
 taagcctggc ttgctaagtg tacttagcaa aatctagagt tgactaacgc cagggtggat 300  
 gtagcttggg agggctccat gatttcacac gtcggactag aggtgccctc ttttaa 356

<210> 4769  
 <211> 350  
 <212> DNA  
 <213> Glycine max

<400> 4769

agctttgctt ctacaatatt atattattac gatcgaaatt gaacaacaga agctctcgag 60  
 aaattcgaat ggtcatgact ttccacacga atgttcaatt cggggacata actcatgtag 120  
 acgctccaaa ttgaacagcg gaagcattcg agaaatttga atggtcataa cttttcacac 180

gaaagtccga ttgggggaca taactcatgt agacgctcga aattgaaaaa cgtaagctct 240  
cgaaaaattc gaatgggtcat aactttttcac tcggatgtcc gattcgtgga cataactcat 300  
ctagacgctt gaaattgaac aatagaagct ctcgagaaat tcgaatgctc 350

<210> 4770  
<211> 357  
<212> DNA  
<213> Glycine max

<400> 4770

agcttagtcc ataaggtttt ccatatgtgg ctaaggaact tagcatctct atctaacaca 60  
atggtcctag gcaaaccatg cggcttcaca acttccctga aaaagagttt tgagatgtgg 120  
gaagcatcat ccaccttggtg gcatgggtcta aagtgtgcc tcttgataaa cctatccacc 180  
accacaaaga tagagtctac acctctttgg gatctaggaa gccaaggac aaagtccata 240  
ctaattgtcta cccaaggtgc agaagggatg ggtaagggtg tgtatagccc atgaggcatc 300  
accctagact tggcttgtaa acaagccaca cacctagtgc aatgcttatg gacatct 357

<210> 4771  
<211> 317  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4771

ttaagcaaat tcaaatgaca ataacttttg actcggatgt ccgatttagt tattttataa 60  
tttgagacgc tcaaaattga atgcaggagc tcttaccaa ttcaaagcc aataactttt 120  
tactcggatg tccgattgag tcccgttaata tatctagatg ctcaaaattg aaaacagtaa 180  
ctctaagcaa attcaaacga caataacttc taactcggat gttcagattga gtcatttaat 240  
aattcttgac gctagaaatt gaatacagaa gctctcacca nnattaaatg acaataactc 300  
tttactcaga agtctga 317

<210> 4772  
<211> 358  
<212> DNA  
<213> Glycine max

<400> 4772

agcttgtagg ccttggatct tctttatcaa tggagtcctt tgcttcttga agatgaatgg 60  
 cagtggaatg gagatggaag aaagatgatt ggagacgaca cttcaaggag aagatgagtc 120  
 aagaagaagc tcaccatcat aggaagccat ggataagagc ctgaaggcag gagaagatga 180  
 gtggacagag agggagagaa ggagcacgaa attttatgcc tcaaagagg tataaaacttt 240  
 gaagtgtaat tcttaaatga tcaaagttga aaaaatgcac acacatggcc tctatttata 300  
 gcctaagtgt cacacaaaat tggaggggaaa tttgaatttc tattcaaatt tcacttga 358

<210> 4773  
 <211> 347  
 <212> DNA  
 <213> Glycine max

<400> 4773

agctcgtaag gcttttgtct ctctattgtc acatgctcat gcaacaatta ttagccgtgg 60  
 ctataccaga catcttgcca aacaaagtca ggtagccat aactcgctg tgctttttct 120  
 tccatgctat atgtagcaaa gtcattgatt ctgtcaagtt tgatgagcta gaaaatgagg 180  
 ccgcaattat actgtgccag ttggagatgt attttccctt tgctttcttt gacatcatga 240  
 ttcacttgat tgtgcatctg gtcagagaaa tcaaagtta tggtcctgtt tatctacggt 300  
 ggatgtaccc agttgagcga tacatgaaga tcttaaaagg gtataca 347

<210> 4774  
 <211> 248  
 <212> DNA  
 <213> Glycine max

<400> 4774

gaatggcaaa ccaatggaga tggaagaaag acgatcgag accacacttc aaggaaaaca 60  
 cgaccaaga agaacccac catcatagga agccacggat aagagcctga aggcaggaga 120  
 agaagagtgg acagagaggg agagaaggac cacgaaatca tacgcctcaa atgaggcata 180  
 aactccgaag cgcaatcctc aaatgaccaa agtcgaaaaa acgcccacac atggcctcca 240  
 tccatagc 248

<210> 4775  
 <211> 324

<212> DNA  
<213> Glycine max

<400> 4775

tgcttaagat tgtatattga tttctttaat ttgcacacca tgtgtttctg tccttttact 60  
gagaacccca ttgactaatc catataaaca ttctcatcta aatatccatt aagaaagaga 120  
gttttcacat ccatctgatg tagctccaag tcataatagg ctactaatgt catgataatc 180  
ctgaaagaat cctttcgtga aaccagggaa aatgtctctt tataatcaat gttatctttc 240  
taagtaaacc tcttaacaac aagtctagcc ttgtaacgtt cgaagttggc atgagagtca 300  
catttagtct tgaagaccca ctta 324

<210> 4776  
<211> 320  
<212> DNA  
<213> Glycine max

<400> 4776

tgctactcca cccatatctg gccttcacat taaccacact taacactctt ttttttcaat 60  
gttagtggtt agctctactg agctttaaaa gattggctaa gattttgtta aaacataagc 120  
acttagacaa tgaaggaaag ctggagttgc tgcacatgat gtccaacgtt atgtcaagga 180  
ataagatcgg gctgcacaat gtacaaggca agataaaatg gcaaataag aattgaagtt 240  
gcaggatcca cgatgtcgga tacaatgtcc tgacatcctg cccgagaata ctggagttgc 300  
tgtacaatgc aagataaaag 320

<210> 4777  
<211> 355  
<212> DNA  
<213> Glycine max

<400> 4777

agcttgtagt tgctggaaat ccttctggat tattagtga cagcactgat ggggtggaaca 60  
cagcttctgt tgtgggaaca ttctcagggc ctaagcatcg cttggccaca gcagcaactg 120  
tgaaggacgg gaaggtgtat ctgaaccata tggttggaat tggataccca aaaaagaagc 180  
atgcaattgt tgaggcagtt ttttaacgca tactttctag aaatctaaac attgggggaac 240  
tgggaatgtg gggatcatatc atttacagga cgtttagttg aaatttggtg tacctttgct 300

tatttatggt tggttttggt gcattacttg gcctcagacc tcaatgcttt tccct 355

<210>	4778
<211>	348
<212>	DNA
<213>	Glycine max

<400> 4778

agctttccct	ctttgaacaa	atactcctca	gccaaataga	atccatcttg	ggcctttttc	60
ccacaactct	cataaatggg	agagagaaat	gttcatctaa	agcatacaag	tccttaatat	120
tatcaaatcc	taaaatttga	gctcctaggg	agaaaaacaa	tgtgtgtctc	ctagagaggg	180
catcagctac	cacatttggt	tttccctttt	tgtatttgat	aacatatgga	aattgctcta	240
ggtactctac	ccattttgca	tgccctcttg	ttaacttgct	ttgccctcta	atgtacttaa	300
gtgattgatg	atcactatga	atgacaaaatt	ccttggaaac	aaggtaat		348

<210>	4779
<211>	315
<212>	DNA
<213>	Glycine max

<400> 4779

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taaaactact	ctttctccct	gcgactatgg	actctaactg	agctgacaag	aatggggtcag	120
acttctgacc	ctcacggatc	tcgcttaaga	gttcgctggg	gactctcaac	atacccaact	180
taatgctact	agaggtgatc	tcacatgcc	aactcatgtc	tctaaactgc	tctaagagat	240
ccaactctct	aaccatcaaa	gcagacattt	gaagggactt	tctacttaag	gcctcagcta	300
ctacattggc	tttac					315

<210>	4780
<211>	340
<212>	DNA
<213>	Glycine max

```
<223>      unsure at all n locations
<400>      4780
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agcttanggg acgttttgat tattcttata tngcagaaaa agactatgaa acttttgcac 60

acaaatgggtt cgaaaaaaga cattcctggt tgcttgaaat gtaataacgg tgttgcatatc 120  
gccgaaaggc attacctaatt acttataatg accatcatga atgtgaaaac tcatctttgt 180  
aatgtcatgg gtcagattcg atattgatgg aagctcacgg ttagatcaag cttgtaaaaa 240  
atgggtggcca ctcccacaat aagcaaagga atcttgcct taactgtgag tgcattaatc 300  
acttgatagt ccaagcaca gactataaa ctgtgcttat 340

<210> 4781  
<211> 337  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4781

gctttgcatac agctctgata aatctgccat atactcatcc gatattaggc ctcatgagct 60  
ttctcatatt tagcagctta ttggaattag cttgagtggc ttccctttta gatacttggg 120  
tgttcccctt ttatcatcta gattaaatgt atgccattat actcccttgc tttccaagat 180  
tactggcctg attcagtgat ggagcangaa gtctttatct tatgcaggta agctagagtt 240  
gatcagagta gttattcaag ggaatgtgaa tttctggatg gggattattc ctttgcctca 300  
atctgttctg gatcgatca acacttcatg tcgtaat 337

<210> 4782  
<211> 411  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4782

agcttgcctt ttgcaattcc aagacactag tgagcttcca agtatatgac atgtaccact 60  
tgtaattntc ctatctaatt tgcattctcc agaactcagag tctgaaaaac cttttaagtt 120  
tagggaactt cttttgaata ccacanacct acattggttg tgcccttaag atacttaatg 180  
atcctcttaa cagtagttaa gtgagattcc tttggatttg actgatatat ngcacataat 240  
caaacactta gcatgatatc cgggtctactt gcagtttagt agagaagtga tccaatcata 300  
cctatgtatc ttgattcatc cactgattta cttttctcat ctaagtaagg gagggtaatg 360  
ttgtaacgcc tttaaatttc aataactgaa aatagatgtt tgatgtattt c 411



<210> 4783  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<400> 4783

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 ttgcaaaata tgaatatata tagcaggaaa atgcctggca taatatgatt atatatagca 120  
 tgaagtgcct tacaaaaatgc ttagatgggt agcgtaaaag tgtttttcaa aatatgtgta 180  
 tttgtgaata ggtagcataa gaagccttcc aaaaaatgtg tatatatata ggatgtagca 240  
 tgaaaagggt gtcacacaat atgtcatgga tatgtgtcga aatgcttctc acaaatttta 300  
 tgtgtgatat gcgttgtgtc ataaatacat ggcccatatg atatt 345

<210> 4784  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<400> 4784

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 cctcatatct cttttgacaa ataaagattc cattagttgg ttgattcact tctttatctc 120  
 cacttttaac atagagtgtg tgctcataat gacattttgt gaacatagct taagaaaaat 180  
 atgcttcaat gcgactatac catgctcgtg gggctttggt caaccgtac aagaaccttt 240  
 ttaatcttgt aactttatgc tcaacttcaa tcttgacata acccggtggt tgttcaataa 300  
 atacttgctc cttcaagtat ccatgtaaga atgttgattt aacatctagt tggcaaattg 360  
 gccatgatat ttatgccact aaagcaatca tcaatctgat cgtgtcatgt cttgcaactt 420  
 gagaaaaact tctgtatagt caatcccata tt 452

<210> 4785  
 <211> 472  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4785

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ttgctactgt taataataac tcttgtgtgg ttccaattc tgttgtttct tcttctagta 120  
ctcctagcct ttggcattct agattaggtc accctaattg tcatgtaatg aaactagtct 180  
tcaatcattg taacatttct ccatcaaata aaaatttctc aggtttttgt tcttctagtt 240  
gtatgggaaa gtctcataga ttaccatctc acactcttgt ttttgtttac ttctccttgg 300  
agcttatttt cacatatttg tggggacctt ctcatntgac ttcatatgct ggttataaat 360  
attatgtatc ctntattgat gtntttttcc aagtacacct ggatatttct tatcaagtct 420  
aaagttgaaa ctctntgttt tcaagcttta aatctatggg gaactgcaac ta 472

<210> 4786  
<211> 464  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4786

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tagtctgttt cttcgacttc caagaaacag cccaccagc tatgctaaat atatagccac 120  
tggttgcttt ggaatcatct gaaagagtgt tccaatctgc atcactgtat ctttcaagta 180  
cagcgggaaa ccttttataa tgtaatccaa ggtttatgat tcttttaagg tacctcatta 240  
ccatttcaat agcgtgtcag tgctccatac taggtctgct ggtaaaccta cataataatc 300  
ctacaacata ggctatgtcg ggtctagtac aatcagtggc atacctaagg gtgccaatga 360  
tactngcgta ctcagttggg tgtatacctt caccagtgtt cttaaacaag ttacacttg 420  
gattatatgg tgtactagca ggtntacagt caaagtagtc atat 464

<210> 4787  
<211> 311  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4787

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atatatcgag acgttcgtaa tngaacaatg gaagccctcg agaaattcaa atggtcataa 120  
ctttttactc ggatgtccga ttcaggcaca tcacatatcg agacgctcgg aattgaacaa 180

cggaagctat gaagaaatca aatggtcata aactttactc gaatgtctga ttcacgtgca 240  
 tcacatatcg cgacgctcga aattgaacaa cggaagcaat tgataaattc acatgggtcat 300  
 acttttttgt c 311

<210> 4788  
 <211> 358  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4788

tatctacccc atntctgaca gtgctngngt aagcccagtc caggtggtac caaagaaagg 60  
 gggcatgaca gtcattcgga ataaaaagaa tgacctaat ccaacaagga ttgtcactgg 120  
 ttggagaata tgcctcgact accacaagct caacgaagcc acaaggaaag accattttcc 180  
 tttgccattc atggaccana tgttggagag gcttgcgga caagcttatt actgcttctt 240  
 ggatggatac tctagatata atcaaattgc gataaacccc aaggatcagg agaagacggc 300  
 cttcacatgc ccttttggcg tctntgctta cagacgaatg tcanttgggt tatgtaat 358

<210> 4789  
 <211> 464  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4789

gcttgagatc ctgacaggat ccanacacaa acaaacatat ggagtgagtt atcatattcg 60  
 taaacaggta gagataaatg aagacacata tataatataa gtataacaag ctcaacttag 120  
 cacaattcac atcattttac cactcatgta acatcacttg tccaagaat ctaataaaaa 180  
 aatcacattt cacactttca cataatcacg tgttcagaac aacacattca agtacaatac 240  
 aacatctcat gctcacacaa ttcattactc accatcacgt aacaaatcac aatgatcatt 300  
 acatagacat tatgcaacaa atacactaag actcaattnt atatgcaatg tggattagg 360  
 tgagtgaata atctcatcag gcgcctagga atacatgaca agacaagtca tacatcggt 420  
 agtcaagtca ctctcactag gtaaaatcat agagagagca atca 464

<210> 4790  
 <211> 468  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4790

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 ccatcttgaa cattatgaac tcattctttc attgaccttt gtgccttttg tcattacctt 120  
 tgtcatcatc ttttggtata atcattgtta tcatcaaaac atctttgaat cattcttgat 180  
 tcaccatgaa gctttgcttc tacacgttag tccctcaagt catagaaata agataacata 240  
 caaatgctaa atgatgaaac atgaaaagaa tacgaatctg gggatccac ggtcatgtgg 300  
 ctccgcatgc caccggactc ttgggtcagc gtaacaaaaa gtgaggtggt cgacaaaagc 360  
 atggctnttg ctctacgta tctcaatnt gtgatgagga actcagacct acgtagttct 420  
 tgataactgt gagaactaaa atagtctcgg tgttttcttc actaaaat 468

<210> 4791  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4791

cacttccagn gccctacatt acgagtatat gtgtctaggg taatcatgct tcatatngaa 60  
 tttttgatta cagcttcctc ttttctaata gtcaatatca tgggtaagtt ggctattgta 120  
 tccacttaga agttattatt ttgaaaaaaaa aaaaaaagct atttgctggt ttaagcataa 180  
 taattctggc aaaaaaatgg aaaaactaag gccagaatta gacattacag atgggatggg 240  
 gaagtatgag ttcaagttcc tatattgctt caagaagcta gttattacaa tcaatggcan 300  
 aactctagga ccagcatcc agccatagga aggtgatacc attattgttc aagttaataa 360  
 tagtttactc acagaanacc ttttgatcca ttagcactgg atcagacaag 410

<210> 4792  
 <211> 478  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 4792

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tactaatgcc ataattactc aaaaggaatc tttcttagat acaggagaaa aaatctttgt 180  
gtaatcgatt ctttctcttt gagtgaacct ttggcaaca agtcttgctt aatgtctctc 240  
aatgtttcct tgtgagtctt tattggtttt aaaaacccat ctacatccga tggctnttac 300  
accactaggc aactgtataa gatcccagac ttgggttaaat gtcatagaat ccatctcatc 360  
tttcatggca ttgtaccaca agtttgattc tttagaactc atggcttctg aaaacatttc 420  
aggatcattt gcagctccaa tgttgtagtc cgattcttgc agatacacta cataatca 478

<210> 4793

<211> 455

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4793

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attcattaga tatagcgtca tccatgtgct ctggctcgat cttggaaagt agtggtgtgt 120  
gcttgagaga attccttgtc tggactntgc ccttaggac accaatgac taggactctn 180  
gatgatattt tctcagcaag tgtctagttg gttctctaac ttcttttaggt tgatcatcca 240  
ttgggtgagtt ggacacaagt tggttctgac tggatgcaac aatagacttg acgatatctt 300  
caattttcat ctctgcaaag gactcatcca gttttgacat ggtagtgta ggctcgttgt 360  
cattaaacct cacatgaatg gcttcttcca nagtcaaggc tctggagttg tacactctat 420  
atgcctacac tattatcant aaatttttat tccct 455

<210> 4794

<211> 382

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4794

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taaaagataa ctaatctatt agagattacc caaatagttt gatcatgcaa ttcagtgcaa 120  
 aaaattctct acctagatct accaattaca tgcaggtgat aactattatg caatcgattg 180  
 agtattagaa tgacctatgc caaataaaca ttaaaataag gaagaaaatt aattaacata 240  
 aaacaatgag aaattccatt aagaacaagg aaaggagtac atttggacaa ttacatcata 300  
 accctcgaac taaggggact atctactcaa aatcaaagca naattagcaa ttctataaaa 360  
 taaaataaaa agtaaagata ga 382

<210> 4795  
 <211> 496  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4795

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 tatccataat gagagaacaa ttntttttta aaaccttgca tctcgtatga aatatgttct 120  
 ctcttttaggt ttgggttagg tcagcggatt tactcccaag gagccttctc accattagaa 180  
 gatcaccttc ttcatagggt aaacctcttc aatatgctca tcacccatgg cttcaccttc 240  
 atttcactt gaggaaggag aagaagtagc ctctcttgg ctactataga tgtcttgacc 300  
 cctcataatc atggttttct ttgtgggggt attgagaagc aatgtggcct ttcccaatac 360  
 atttaaagca cttaatgtta ctagtctat cttatngaac tagccttgga gtgatttcct 420  
 ctatgcatnt acccttatca tccttnggct tagaaggtag tactccttgt ctcttacttc 480  
 catanttaaa ctactt 496

<210> 4796  
 <211> 467  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4796

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 aatgtatatt gaaaagcana tcanagcctt gcttttatag actcttcatg tctgggtcaag 120  
 aaaaccattt agaagagtta caacttttag aanaacttan aaccaatttg aaaaagtcaa 180

aaaacctttt gaagagttac atcttttgat ttattcagaa acagtcactg gtaatcgatt 240  
 accaaatcag tgtaatcgat tacacaaggc ttttaagtga aaggatgtga ctcttcacan 300  
 tttgaattga atttcaacgt tcaaaggcac tggtaatcga ttacccaaaac attgtaatcg 360  
 attacagctt tttgaaaata atttgaaacg tttaaattca attttgaaaa ctttnntcaa 420  
 aacaattttc tactggtaat cgattacagc aatctggtaa tcgatta 467

<210> 4797  
 <211> 357  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4797

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 cttgacataa catattgccc gaattctatt caattatcaa tgatccatta tattaatgaa 120  
 agtcaaaaata gattcctttg gttctttaat aaaagccata tattctaagg cagatagttc 180  
 cgttatttag gtcttggtc agtcagtggc ctgggatgcc atgggtgcctt caaaaaagag 240  
 gacacatgta ggtcgtccaa agcctttgta tgttgagaag ctcatgagag acctatgcac 300  
 tattcttcac gaacaacagt cttatttttc tgcattcttct gaagaggatc ttctttt 357

<210> 4798  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4798

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 tggacgagtc tatggagtgc gtgttgggtc agcatgatga ttctgggaaa aaggagcaag 180  
 ccatctacta tctgagcaag aagtttaccg catgtgagat gaattactca atgctggaaa 240  
 ggacgtgtta tgctctggta tgggcatcac atcggcttag gcagtacatg ctcagccaca 300  
 ccacatggct tatttcaaaa tggatcccgt gaaatacatc tttgaaaaac cggccctcac 360  
 gggacgaatc gctatgtggc aggtactatt atctgaattc gatatcgttt acgtca 416

<210> 4799  
 <211> 457  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4799

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 attatggaat ggacatccat caactaccat agaatggact taacttagtt tattgggacc 120  
 gataataata gtcgtttaca acacttgtea taaacttgta aaaacaaatg taataaattt 180  
 tgtagggaga taattacatt attttaaaaa ttaatatata agtatatttt cttcaatta 240  
 tacattgtcg tatatgataa aattgttgat tntaataata attattttta aatcatattg 300  
 atgatatctt ttattaatca ataagttaa taaaaatata tatttactta acttacattt 360  
 aaaagatttt ttaaagacc tatagttnta ctttttaacc aaataacgtt ttctttataa 420  
 aattctatgc ataaggtaa ctctttttat ataaaaa 457

<210> 4800  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4800

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 gccacattgg tgcaagttgc tgctacagta cctcttaact gttcaagtca acaagatggc 120  
 ttaaggggtg ggttgataa acaatttaat taattgctta ttggataaat acttatcatg 180  
 caagcgctta tgtataagct atttctgtaa tctaagagga aataggatta aactctttta 240  
 atacaagttg taagttattt tcacaagtta tcatggagat tggagagctt attgaaataa 300  
 gctgaaaaca aattatggag agatcataag ctatgtccat atngctctcc aaacacttat 360  
 acaagttctt atgtcataag ataagaccaa acaaactgta aataagttgt tc 412

<210> 4801  
 <211> 421  
 <212> DNA  
 <213> Glycine max



<223> unsure at all n locations  
<400> 4801

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ctatttattt atttttnta aaaaatagta acaacaatgt ttttaacatt gagtgggtcca 120  
acattcatag ttnttttctt ccaatgttca ttttaatttt ttatttttta atttttctct 180  
cctgggctat tccactttcc ctctacctt cctctatgtc tcttcttttt tccatctctc 240  
tccccgaccg ttccacttac ccttctctt tatttctctt cctctatcgc tgaccctttc 300  
acttcccttc ttctcttctt ctctttttat tcttactctc ccacataccc tcttctctat 360  
tcccttttct ctttttctc tcccaccaca cgactattcc tctcccttcc ctctttttct 420  
c 421

<210> 4802  
<211> 421  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4802

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gcttaaggta aaaaaaatc atttttcana atttaaaca aatttgtccc agaatgcacc 120  
actggaacaa tgaataagaa catgatatga ttgaaaaana aaagcttctg attctggcaa 180  
cttacagttg ctaatccaac tgagagggtc gcaatgaagg taccctcagt ttcaccacta 240  
caataaaca gatgaaacac attagtgtgc acaaagaata atacaatgtc acaaaacaga 300  
acaaatacct cctgtggcta gccatgacac cccaaccagc ttgttttagac attctcacag 360  
cttcaatact ttcagttaca ctaccaattt gattcaccta acaatgatga aataataata 420  
a 421

<210> 4803  
<211> 421  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4803

tcgcgatntt atctctctca gactngagtg ttggaagacc aattacttag tcttctctat 60

ccagatgatg taaatgatgc atgttaatgt gtactgcctt acaatgccac aaccatgaat 120  
catctatctt acttacgaaa caactcagct catgaaatga tgcattgtca acatttagca 180  
tatagatatt acctattccc ttactaatgc ggacaacttt accgaatatg gtttcactta 240  
taagacaaca atttctgttg aactctatnt tgaagccttt atcacaaagt tgactaacac 300  
attctntatc agagttttct attgagtcct tatatttcct tctcccatta ttgttccttt 360  
gttattgtct ccaaagtga catatcctgc attnnttgac acaaaatcaa atagtttgga 420  
c 421

<210> 4804  
<211> 485  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4804

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ctattcatta tatgataatg aaatttataa gccttacata cttgactctc agaacagaat 120  
aacaataaaa acaaaaacca caaaactgca tgacgcataa aataggattg tttattgaca 180  
cattaaaata actaacatta atttgtatct taattctctt ttaatcacta tagtttgaaa 240  
ttgatctttn tagttcctat aatttgtatt ttaattacct tttagtcctt actgcaataa 300  
atatataaaa taattagcta caaattagtt ataaattatc aactattttt ttattacaaa 360  
ttatcttggtg ataaattagt tatgaattac ttgctaatat tgttgtagct aattataatt 420  
gataatatta actcatattt gatggtgaaga actaaaatga aatcaaaata taaagtatat 480  
ggact 485

<210> 4805  
<211> 485  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4805

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tctggcttca gcaggagtca tgtctccaag ggctccacca ctggcagcat ctatcatact 180  
tctctccata ttactgagtc cttcataaaa atattggaga agctgctccg aaatctgatg 240  
gtgagggcaa ctggcacata gttttttaaa tcgctcccag tactcataca gactctctcc 300  
acntgagttt ctaataacttg agataccttt cctgatggct gtggctcctg aagcagggaa 360  
naaatnttct aagaatactc tcttaaggtc atcccagctc gtgatggacc ttggagcaag 420  
gtaatacagc cagtcctttg ccactccctc cagagaatga agaaaagcct tcagaaatat 480  
gtgat 485

<210> 4806  
<211> 382  
<212> DNA  
<213> Glycine max

<400> 4806  
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gatccggcgc gggttcttct cgtcgagggt gaggagggtc cgcgcgttgt tgcggatgcg 120  
gctgagcgcg tactgcaccc tccacagctc tctcttgac cgaagcccgt actcaccaac 180  
cagcttcaac tccgcgtcga gacgctcctt ctcgtacgga cgacgcggct tcttgaatgt 240  
cttcccatct gacaaacaga acaaaatata acagatcaat ggcgttgcta gggttacggg 300  
tttcaaaacg gcgtcgtgag aaactagaac gtggatcggt tcgtggactt acagttcctg 360  
tagaaggaga cgtgcaccat gg 382

<210> 4807  
<211> 347  
<212> DNA  
<213> Glycine max

<400> 4807  
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tccttcacaa tagcagtaac aacaacaaca acaacagcag caacatctac agccccagat 120  
acagcaaaca gttgaggctc cttcgcaacc ttcccttgaa gaacttgta ggcataatgac 180  
tatgcaaaac atgtattttc agcatgagac cagagccttc attcagagct caactaatca 240  
gatgggacaa ttgtctacac agttaaatca acaacagtcc cagaattctg acagattaca 300

ttctctatct gtccagaatc ccaaaaatgt gagttccatt acattga

347

<210> 4808  
<211> 253  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4808

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ggcgacatac ttgggcgacg cctcatctg atatatcacc tcaatcggca atgtctccaa 120  
aaccctatac agaaccctt ccacaccttc cactctgtcc atgacgatct tcaacctatt 180  
caccatcccc ccatgccgac tgagagagac gaccactacg acgacgctgc tntacgtgct 240  
ggcactggcg tgt 253

<210> 4809  
<211> 395  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4809

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agacttgtca aattcagtag caagttcttc aacaaggctt cttccaacat gaaatgatct 120  
atgtgcctct gagaactctt tggatgtgac aaatctataa ggctgatctt tgtctgcccc 180  
gtactgctcc tgatccttcc ttgatgttac ctataacata ataattaatg gtcaaaatta 240  
aatgtatata acattctttt accagtgacg acagattaaa ttattgggac agaacacaag 300  
accacttact tcttgcaaaa agtctgccac acctttcttc tcangacatt taaaacccat 360  
tgattnaaaa attccacaca tgtcggggg accct 395

<210> 4810  
<211> 468  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4810

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 gggggaaaaa tggatnttgg ggggtttaagt tatgaataaa acaacatcgg tttcttaaaa 180  
 aaaatcgatg ttaagatatt aatgttaaca tcacgttttg gaaaaaccaa tgttaacatc 240  
 aacttggtta catcggtttt tttaanatcg atgttaatta agtcaactta tttaccaaaa 300  
 tgtcaccgcg cttttattta catcgatttt tgcgaaaact aatgctaagc ttacgaggtt 360  
 aaatcaataa attgtagtag tgaccttctc tcaactcagc caatatatgc aatctcccc 420  
 ttctacanat catgacaact nnntgtgtca tccttttata agtcttta 468

<210> 4811  
 <211> 352  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4811

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 tcatgcttgc ccaaatgatt gcatactgta ccaacatgaa ttcaagaaat ggccatattc 120  
 ccaaggtgtg nggtatcaca gtacaaagtg aacgatgatg acgactgtag tagtgacgaa 180  
 aactcanaga aaggccccct agcgaaggtg atatggatc tccccgtcat tccaagggtta 240  
 agcgtctggt tgctaattgga gacgacgcaa aagaccttaa tccggctgat tcctcacaat 300  
 ggaagaacat tgatcggtng tatctggatt tcaacaaaga ggcaagaaat ct 352

<210> 4812  
 <211> 372  
 <212> DNA  
 <213> Glycine max  
 <400> 4812

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 atatgcaatt tcagcaagag ataagagcct ccattcaaag tctaacaaat cagatggggc 180  
 agatggctac tcagttgaac caagctcagt cccaaaattt tgacaaattg ccttcacaaa 240  
 ctgtgcagaa tccgaaaaat gtgagtgcc tcaacttgag gtctggcaag caagttgaag 300

tgctccacc agtagcaaca cctgcacctg aacctgtcaa gcttcattct gcacttgaaa 360

aagaggatga ga 372

<210> 4813

<211> 449

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4813

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aattntctta gagcttccgt ttttaattacg agcggctcga tatattacgg gactgaatca 120

gacatccgag ggaaaacgtt ttgtcattag aatttgctca gaagctttgt tttcaatatc 180

aagcgtctcg ttatattacg ggacttaatt gtacatctga gttaaaattt aatgggggtt 240

gaatttgcta cgaccttctc tttccaatta cgagcgctc gatatactac gggacacaat 300

cggacatccg agatataagt tatttttttt tgcatttgct cagagactta tgtttcaatt 360

tcgagcatct cgatatatta cgggactcaa tcagacatcc gagatataag ttattggcct 420

ttgaatttgc tttcgagcgt ctcgatata 449

<210> 4814

<211> 413

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4814

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atgaggctta tgatgggcaa aaattacttc aacattctaa gattatatgg cttgngctta 120

tgatggatgg cctgtgcagg aaccatatgt tgcggatgc aagaggattg atggatctga 180

tgatgaggaa tggggtttac ccagatacaa ttgcttatag tactctcttg catggatact 240

gcagcagagg gaaggttttt gaagctaaaa gtgttcttca tgaaatgata aggaatggtt 300

gtcaacctaa tacttacacc tgcaacacat tgctccagga aatggttgta gtaagagtct 360

tcanacttat aatgcattga tccagatatt tgcagttata acaatattat cac 413

<210> 4815  
 <211> 397  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4815

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 gtgaagaaga atgtggcatc tacctgnggt gaaaaacaag agcaagcctt tgctttgctc 120  
 anagaaaagc ttactaaggc acctgttcta gctcttcttg actnttctaa aacttttgag 180  
 ctagaatgtg antgccttgg agtgggagtt ggagctgtat tgttacaagg tgggcaccct 240  
 attgcttatt ntagtgaana acttcatagt gccaccctca actacccac ctatgataaa 300  
 gagctntatg ccttaataag agccctccaa acttaggaac attaccttgt ttccaaggaa 360  
 tttgtcattc atagtgatca tcaatcactt aagtaca 397

<210> 4816  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4816

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 cccttttttg ctnatgatgat gccaaacttg aatntccatt tgagtgcatt tggagagtct 120  
 tgagagtaga gacttttctt gggaaaacct aaagtttctt aacactaaga gaaatgtgtc 180  
 aattcatatc atcatcatca tcatcattag ttggagttat atatgaatgt atgtatgcag 240  
 tgcactaatc atatgcatct canatccatg tttcatctgc ttgacttgaa gtccaaggaa 300  
 gaagttcaac tctcccatca tagacatctc anattcttct tgcatagaac tgganaattc 360  
 cttacacana gtttcattag tagcaccaaa aattatatca tcaacataga 410

<210> 4817  
 <211> 349  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4817

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 agttntgatg tttggtgcag ttcttgetgc actcacctac tactggcgca tgaagatgcc 120  
 agagacagca cgttacactg cccttgtggc caagaatgcg aaacaagctg ctgcagacat 180  
 gtctaactg tttgcaagtgg aacttgaagc tgaagaggag aatgtgacaa aattgacaga 240  
 gaatgagagc cacaagtatg cgttgggtcac caacgaatta gtgaaacgcc atggntctga 300  
 tattgtggga accaccacca cgtgcgtctt ggtggacata gcattctac 349

<210> 4818  
 <211> 495  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4818

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 ctatcgtcca attgtaaatc tgcaaaagac tcatctagct ctaataattc tttatcaggc 120  
 ttatttttgt caaatcttat atggatagct tcttcaacaa ctaaggttat tgagttgtac 180  
 actctaaatg cctttgaagt ttcaaagtat caaagaaata ttccatagtc acttttcgag 240  
 tcaaaatttt ccagactat catttgtgtt aagaatgaaa cacttgcacc caaaaggatg 300  
 aaaatatgat atgttgggtt ttcttccctt ccacaattca taaggagtct ttntcaagat 360  
 gggctctata taaattatgt tntgaagata gcatataagt tcttaggggt taagttatca 420  
 gttggcatgg ttctagccat ctcttggaga gaattgttct ttctttcaac tactccattt 480  
 tgtagcggag ttctt 495

<210> 4819  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4819

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 ttgttatcat ttctttctcc atcattgagg gtgctaccta ggctgccagg tctctccacc 120  
 tttgggtgta tactttgaaa gatttcatgc cccttnttgc acatgttatg tagttgcac 180



ctatccggag ccatatcaga attgtactga cactgcctaa cgaacgcaac cattagtgat 240  
gcaagttcca ttggagcttg taggcctagg atcttcttca tcaatggatt cctttgcttc 300  
ttggaagatg aatggcagtg gaatggagaa aggaagagag agaggagacg ccacttcaag 360  
gagaagatga gtctagaaga agctcaccac cat 393

<210> 4820  
<211> 394  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4820

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tctggaagac caccctcttc attgtagccc tgctgcttct tcccaaaact tgaacacctt 120  
ctcacaattt gcttgatcac atctgcttgg ggtagcttat tggattnttt gatggccatt 180  
gtgatatgtg attgtgttac ttagtactct ttgcacacct tcaaaagggg ctcttgaggg 240  
tgctgaaagt gtgtgattca tggggcgagt ttggataggc atttatcatt gngacattgg 300  
tgtaagtgga aatgagaaat tgagttttag agaaacaggg tcacgtggct gtggggacac 360  
atgtagcaga ccacacccan natngtcgta catg 394

<210> 4821  
<211> 474  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4821

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ttatcaaaca ctcgagttaa ctcattoact ctacaagtt taaaaattca cttaccctct 180  
atgagttgac tntgtataaa ctctcttttt agtagaccct aggtagactt tataaactct 240  
aagtaaactc ggtagactct ggagtttacc accaagtcaa caagtcatca agttaaaaaa 300  
attagaccaa aatgtaagtc attntgggtt attntttgtc tgtttagtgt tcaacatacc 360  
ttcatttagt ttgttattcc caaataanaa aattctcatc ttaataaca tcaaaccctt 420

gatgggaatg atctacgact actataacat ctgcaagtta ttatctagta gtca

474

<210> 4822

<211> 446

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4822

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tatgatcttt caagcaacag atacaatcca ggttgagaa atcatccaaa tctgacatgg 120

gcaagtcttc cacaacaaca acagcctatc cctcctttcc agaatgttgc tggccaagc 180

aagccatatg ttccttctcc aatacagcag cagcagtcac aacaaagaca acaagcagct 240

gaggcccctt ctcaaccttc cttagaggag ttagtaaggc aaatgaccat ccagaatatg 300

caatttcagc aagagacaag agcctccatt cagagtgtga caaatcanat ggggcagatg 360

gctactcagt tgaaccaagc tcagtaccaa aattctgaca aaattccttc atagactatg 420

cagaatccga aaatgtgagt gcatca 446

<210> 4823

<211> 208

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4823

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gtctattcan gcgcataata tatcgagacg ctcgaaattg aaccatggta gctctcgaga 120

aattcaaattg gtcataacct atcacacgaa agtccgattc tggcagatag tataccgaga 180

cgctcgtaat cgtacaacta aagctctc 208

<210> 4824

<211> 472

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4824

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aacataattg gagaaatatc aaagggagtt tctactcgcc ctagactcga gctaaatcag 120  
 tttaaaagga atgaagtgtg agacttagtt cctaaacctg cctctcacat gtcaatcgga 180  
 accaaatgga tgtttcaaaa caaacttgat gaatcaggca tcatagtaag aaacaaagcc 240  
 agattggttg cataagggtg caaccaagag gaaggcattg actatgatga aacctatgcc 300  
 ctgttacaag gttagaagcc attatgctgc tgggtgcttt tgcataatn tatggattta 360  
 gattattcca tatgtatgtg aagagtgtct ctctcaatgg atacattgaa gaagaggtat 420  
 atgtagacta gcctncaggt ttcgtgcact atgaacatnc taatcatggt ta 472

<210> 4825  
 <211> 306  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4825

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 tgtcgagcat ctcgacatgt tatgcgctcg aatcggacat ccgtgtgana agttatgacc 120  
 atntgagtct ctcgagagct tacgtgggtc aatttcgagc atctcgacat attatgcgcc 180  
 cgaatctgac cttcgtgtga taagttatga ccattagaat ttctcgagag ctttcgatgt 240  
 ttaatttcaa gcgtctctat gtgttgtaag cctgaatcgg atcgtaccgt gaatagatat 300  
 gaccat 306

<210> 4826  
 <211> 418  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4826

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 anactnttga gctagaatgt gatgcctctg gagggtgagt tggagctggt ttgttgcaag 120  
 gtgggcaccc tattgcttat tttagtgaan aacttcattg tgcgaccctt aactacccca 180  
 cctatgataa agagctttat gccttaataa gagcactccg aacttgggaa cattaccttg 240  
 tttcccagga aattgtcatt catagtgatc aacaatcact taagtcatta gagggcaaag 300

caagttaaac aaaaggcatg caaaatgggt agagtaccta gagcaatntc catatgttat 360

caaatacaaaa aagggaaaaa aaaatgtggt agctgatgcc ctctctatga gacacaca 418

<210> 4827

<211> 391

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4827

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actaacaatt gcttggtttg tgggtctcagc ccatctataa acatattcaa ttggattagc 180

tcgaaaaacc catgagtggg agttcttctc aacaagcctc tgaacctctc caatgcttca 240

ctcagagatt catcangaaa ttgattaaat gaagagattg cagctttccc ttccgcaatc 300

ttggactctg ggaagtatct ttttaggaac tnttcaaaa cttcttccca ggttttcaac 360

ctattacctn tgaatgagta gagccacctc t 391

<210> 4828

<211> 473

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4828

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acacattctt ttctctagcc aatcactcac ttaattctcc atattctccc cctttgtttg 120

tgagtttaag ctctacttga aattaagtta ttcaatcttg tgagttcttg atttaatccc 180

tattttctct ccccttttgg catcaacaaa aagccaaagt gcgtaacaaa tataaaacat 240

acataaatga ctaatcatac acaagacatt cattgaanaa tctaaaccaa tcatgaagca 300

aaaacatgaa taaccacaaat taatatataa accacatagt catataacat aattcataaa 360

aattcagtca tactaaacaa atattaaaag aaatactaga tggtcaaagt tcataataat 420

atagccaaat acatggctag aaatcanagt actaataata ctaaagaatt ata 473

<210> 4829  
 <211> 466  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4829

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 gataatttct tcatttggtt ttgatgaaaa ccccatggat caatgcatat accacaaggt 120  
 tagtgggagt aaaatatgct ntcttgtttt atatgtagat gatattntac ttgcagccaa 180  
 tgatcggngt ttgctacatg aggtgaaaca atttctctct aagaatcttg acatgaagga 240  
 tatgggtgat gcatcttatg tcatcggcat taagattcat agagatagat ctcgaggtat 300  
 tntgggtcta tcacaggaca cctatattaa caaaattcta gagagatttc ggatgataga 360  
 atgttcacca agtggtgctc ccattgtgaa gggatgatagg ttaatttga accaatgtcc 420  
 aaagaatgac tttgagaggg aacaaattga gaacattcct tatgct 466

<210> 4830  
 <211> 502  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4830

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 acttatttta tgccataagc atttgtgcaa gtgtttgaga aaactcttga aaataacttg 120  
 tgaaatgtcc ataagctggt ttttaagctta tttctataag ctcttcagga tagctaata 180  
 aaacagctta caacttatat gaaaacagtt taaccggaat ttctcttcga ttatcgaaac 240  
 aacatataca aaattgttac atgataagta cttaccta atgccttta ttaagttggt 300  
 tttccaatca ggcctaagag attattgaat aaacacttaa ttaagttggt tacactaaga 360  
 tgctgttcat gtgtgcaggg gaaatantca ccaatttgcc aaagagctgt cgatacattc 420  
 caacctgcag tgagtattcc atggaggcat ataagcgata tggatgcggt gaaggggtaca 480  
 gtttaactgc gtggcgata tg 502

<210> 4831  
 <211> 496

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4831

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aatttcaatg caagttacaa gttcccttaa aaatgaactc ttaaataatg attcaaatag 180  
aacaatctga atataaatat aaagcaataa taaataaacg agtttaaggg aagagaaagt 240  
gcaaactcag ttttatactg gttcggccac acccttgtgc ctacgtctag tccccaaagca 300  
acccgcttga gagttccact atcttgtaaa atccttttac aagttctaaa cacacaagga 360  
caatccttcc tttgtgttca gatttcttta caacaagaga acctcgggtc ctctantccc 420  
tntgagaatt tagaaagaaa agaagaataa atctctcttg aaagagatag aatgtacaat 480  
ctgagcactc aattat 496

<210> 4832  
<211> 467  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4832

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ttaagggact caatcagaca tacgagttaa aatttattgt tgtcttaatt tgctatgagc 180  
tttcgttttc aatttcaaac gtctcgatat attacgagac ttaatcggac atccgagtaa 240  
cgagttactg gtgttttgaa ttgctacgag tattcatttt catcttcgag cgttttgata 300  
tattacggga cttaattgga catccgaata ataagttatt gtcgtttgaa tntgctcaga 360  
gcttctgttt tcaatttcga gcgtctcgat atattacggg actcaatcaa acatccgaat 420  
angatacgta ttggcggtga atttcacaga tgttttgttt caatcac 467

<210> 4833  
<211> 468  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4833

ctcgcacgtc cgattcaggc gcatagcgta tcgagacgct agatatctaa catatgaagc 60  
tctcgagaaa ttcaaatggc cataactttt cactcgcacg tccgattcag gcgcataaca 120  
tatcgagacg cttgaaattg aacaactgat tctctcgaga aattcaaatg gtcataactt 180  
ttaactcgca tgtccgaatc aggcgcataa catatcgaga cgctcgaaat tgaacaacgg 240  
atgttctcga gaaattcana tggtcataac ttttactct catgtgcgat tcaggcgaat 300  
aacttatcga gacgctcgaa attgaacaac ggaagctctc gagatattca aatagtcata 360  
acttttact cggatgtcca ttcaggcgca tagcgtatcg agacgctaga aattgaacaa 420  
cggatattct cgagaaatca tatggcataa cttttactcg catgccga 468

<210> 4834  
<211> 487  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4834

atactctagc gtcacctgcc gcatgcaagc ttcacaatcc cacaacacct taattgatgc 60  
agtatataag aaattctaaa taagattaac aatattctca ggcaaatctg ttggatcaag 120  
tggcctcaga ataattaaga aggggggggt gaattaatta ttcctaaacc tttactaatt 180  
aaaaaattac tcttctaagg cttttactaa gttgttaaga gaataaggag tagaagagaa 240  
acttaataga aagtacaagc ggaaattaaa tgcacaacgg aaattaaaag agtagggaag 300  
aaggagacaa atacataaga agttttatac tggttccgca acaaccctg cctacatcca 360  
gtccccaagc gacctcggt ccttgagaat tctttcaacc ttgtaaaacn acctttacaa 420  
gcaaagatcc acaagggatg taccctcct tgttctctt gaaaccctag tggatgtacc 480  
cttact 487

<210> 4835  
<211> 347  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 4835

aagctataga aattaaatgg tcataatctt taactcggat gtccgattct gtcgtataat 60  
atatcgagac gtcgaaatt gaacaacgga ggcattagag aaattcaaatt ggtcataact 120  
attcacacgg aggtcagact caggcgcata atatatagag acgctaaaaa ttgaacaacg 180  
gacgccttcg tgatattcaa atgggcataa ctattcactc ggatgtcaga gtcattgcga 240  
taatatact agacgctcga cattgaacaa cggaatctct agagaaagtc aaatgggtcat 300  
aactgttaac tcggatgtct gattcangcg cataatctat ctagacg 347

<210> 4836

<211> 340

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4836

agcttccatt gttcaatttc gagcgtctcg atatattatt cgcctgtatc tgactttcga 60  
gttaaaagtt atgaccatgt gaatttctcg agagcttccg ttgttgaatt tggagcgtct 120  
cgatatatta tgtgccggaa tcggacatcc gagttaaag ttatgaccgt ctgaatttct 180  
tataagcttn cgttgttcaa ttccgaccat cttcatatat tatgcgcctg aatctgacac 240  
tcgagttcaa agttatgacc atttcaattt ccgagcgtct ccattgttca ctttctagcg 300  
tctctatata tgatgcgcgt gaatctgacc tccgagttat 340

<210> 4837

<211> 456

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4837

agctagtcatt ttatactatt tcttanagtt attgtcatat aagcaatgcc taggctatat 60  
atatatatat atataaggaa ttntcagatc tatttgtttg taacacaaaa gcaagattat 120  
tattctttat ttaaaggcct gaagtaattt gtaaagcgtt tattcaatat atgcattctt 180  
aagctcttaa ataagaacaa tataacgtta aggttaattaa attgcttaat taccatgaat 240  
tcaattaata tttttcagta gtttattatt cattataatt aaatcattct atctaatact 300



cgctgttaat taacgctaatt attctaataca tgcgaattta attactttaaa ctaaaatcaa 360  
 ataccatcat ttatgttttt aattatcata agtttttgct ataattctta aaaaagtaga 420  
 gacaaactca ttaattaaag tgatgaattg aattta 456

<210> 4838  
 <211> 442  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4838

tctctgagtc acctgcggca tgcaagctng gagtgggaagg agaccatcaa ttagacacct 60  
 tagtagtttt gggtagataa catatgcata tgtttttagac caactcaaga agatattgga 120  
 cgacaaaggt gaaagggtgta ttttcattgg ttacgacata gatttaaagg catacaaact 180  
 ttacaatcca tagacaacga aagtgattat cagttgatat gtgacgtttg atgagaaagg 240  
 catgtgggat tggtagacaa gatcccagag gaagctagtg gtgactcttg acaactatga 300  
 agaaaatgat aaacaactag atctaacccc cgatgaacca aaatcatcta ggaggccaca 360  
 gaggaacct caattgctag ttagattaca tgcttgatc atgtctaattg ataattgatcc 420  
 ttccaacaag gagaatatca at 442

<210> 4839  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4839

gctctcgata tattatgcgc ctgaatcaga cttccgttac aaaagttatg atcatatgaa 60  
 tntctcgata tattatgcgc cttaatcgga cntcgtgtg acaagttatg tccatttgaa 120  
 tttctcgata gcattcggtg ttcaatatcg agcgtctcga tatattatgc gcctgaatcg 180  
 gacttccgtg tgacaagtta tgaccatttg aatttttcga gagcatcacg tgttagattt 240  
 cgagcatctc gatataattat gcgcctgaat cggacatccg tgtgacaagt tatggccata 300  
 tgaatgtctc gagagcatat cgtgctcaat ttcgagcgtc tcgatatagt atgcgcgtta 360  
 atcgaacttc cgtgtgacaa gttatgacca 390

<210> 4840  
 <211> 376  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4840

agcttctcga tatattatgt gcctgaatcg gacttccgtt tganaaatta ttaccatttg 60  
 aatctctcga gagcnttggc tgttcagttt cgagtgtctc gatataattat gcgcctgaat 120  
 cggacttttg tgtgacaagt tatgaacatt tgaatttctc gagacctttc ggttttcaat 180  
 atagatcgtc tcgatatgtg atgcgccaga atcggacttc cgtgtgacaa gttatgacca 240  
 ttggaattat cgagaccttc ggtgttaatt tgagggctcg atatattatg gcctgaatcg 300  
 gctttcgggtg aaagtatgaa catggaattc tcgagccata cgatgtccat tcgagctctt 360  
 gatataattat gccctg 376

<210> 4841  
 <211> 462  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4841

agctngtatt gatngcgaat ntacgaatgt gggcagcttt tatatatata tatatagaga 60  
 gagagagaga gagctatgtt attattacag taagattgng gcattatattt tccttcatt 120  
 gattcacatg caggctatat tgntattatt attttttttt tgagaaagt atgttattac 180  
 tgggtaaaga ttggggagtt atttttcctt ccattgtttc acatgcaggc tatgtaatat 240  
 ggatatchat tcgcacgtgc agcaagtcatt ttgctttgct ttccatgata gtaggttgct 300  
 catggaaact tgtcaagaag canaaaattt gcggaagatt gtgactcttt tctacctcga 360  
 ctgacaattt ttatccatgt ctatgcatta tgtctccgca taagagtggg ctnggggaga 420  
 gtagtgcttc tttttggttt gaattaataa tattcagtga ta 462

<210> 4842  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 4842

ttaaggctga agttgagaaa caatgtggat aacaaattaa gaatgtgaga tcagatagac 60  
ggaggatgga caagcacgga ggatggacaa gcaccagggt catttgcgaa atttcttcaa 120  
gaacatggga ttgttgccca atacactatg cctgggtctc caaatcagaa tgggtgctga 180  
gaacgaagaa atcgaacctt attagacatg atgagaagca tgaggagtaa tgtaaagctt 240  
cctcaattnt tttggattga tgctcttaag atggatgcgt atatattaaa ccgagttcca 300  
accaaggcta tctcanagac accttttgag ttattcaagg gttggaaacc aagtttgcaa 360  
catatatgca tttgngatg accatcttga gtangaatta taatccacaa gagaagaaac 420  
tagaccctan gactattact 440

<210> 4843  
<211> 395  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4843

agcttgtag ctngatgact tgtcaganac aatttggtta ctagcgtcaa atcagagaat 60  
taaacctgga catcttttag aaatgcttgt taagtcaaga caggtagaaa tccagtgtct 120  
ccatttgga cctactgctc agtaaactg ttgaggga aattcacagc ctccgtctta 180  
acatcattgg ggttctgaat ccattcacac tgaataagaa ttccttgaag accattataa 240  
tgtcttctga aattgatgac tttatggaaa tacgttgagt tgctgtcccc ttcttttagc 300  
catttagctc tagatttctg ccttaataaa gattcataag ctattgaggc ctcccacaat 360  
tcttggtgaa ttctctctaa cctttatctc atcat 395

<210> 4844  
<211> 345  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4844

gcttganatg aacaacggaa gccctcgaga aattcatatg gtcataactc gtcattattga 60  
agtccgattc acgcgcatac tatatcgaga cgcttgaaat tgaacaacga atgctctcga 120

aaaaatccta tggccatata tgggaccacc ggtgtcggat tcatgcgcat gatatatcga 180  
gacgctcgaa atctaacaac ggatgctctt gacaacattc aacgtgcata acttgtcata 240  
cggaacaccg atatacgcg ataatatata gacacgctcg aaattgaaca acgaatgctc 300  
tccataaatt aaatgggcat cacttgagac acggcataca gagga 345

<210> 4845  
<211> 436  
<212> DNA  
<213> Glycine max

<400> 4845

tgctcctacc ataagtgcct cgtggagaca attatagcct ctttctgcac cgtcatcgac 60  
ccgtacctca tcggaaaccc aaacagtacc tcatcggcgg tcgacaactc cgccattgtt 120  
atctctggta tggcgtcatc cttgggacgac gccctcatct gatctatcac ctcaatcggc 180  
aatgtcctca aaaccctata cagaaccccc tccacacctt ccactctgtc catgtcggtc 240  
tacaacctct tcgccatccc tccatgccgt ctgagagaga cgaccactac gacgacgctg 300  
ctttacgtgc tggcactggc gtgtaatgtc acgcgcgcgg cattgtctgg aagaacatca 360  
gcggcagatg gcggtgcggt gacatcgggg gagtggagca tctccagctt tgaaccctaa 420  
ttgggctgag atcatg 436

<210> 4846  
<211> 473  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4846

agctngagaa tgataatctt ctaacacttt gtttgttatt gtgcagttag tctcaattgt 60  
cactattata aaatacatct tctacatcgg ntatgtagga ctntctacat cnggttttaa 120  
ccaatgttga aagtattatt gttaacatca gttttccaag accgatgttg acatagaatt 180  
gacaacgtcg gttatctaaa taaccgatgt tatataataa gaattacacc aaaaaaagtg 240  
tatgaatggt gatagttgac atcggttttt caaaaaacg atgttaactt atagattaac 300  
atctttgttg tataaaaaatc gatgttaact tatatattat catcagcttt ttataaaaaac 360

tgatgttana tggttatagg ttaacatcag ttcttaaaca aaaactgatg ttaatctata 420  
agttaacatc cgttcttata caaagccgat gttaacgggt tgaatataac atc 473

<210> 4847  
<211> 439  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4847

tgttaccttg cagtttgtaa aggccattct gccttgtagc cttcattact tgtaatgaac 60  
ctttgaatac ctttaaagtt ccaccttctc ctttgaatga acatccagat taatctagca 120  
ttcccaaaga gagtatgttc cttttaagct caggaacatg cctcacatca gggagcagct 180  
ttacagatcc atcttgtagc ttcaatataa tagttccaat gccaatgaca ttacatgcca 240  
tattgtttcc catgagaaca ttccctccat ctatctcctt ataagagctg aaccattcca 300  
tattgggtgt catatggaat gagcaaccgc agtctagaat ccattcctca ttgtgctntt 360  
cagtagagat ggagagcact taatcacttt catatgcac atccaccact gctatatcag 420  
agtcattcatt gtatcacca 439

<210> 4848  
<211> 440  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4848

tcttctgtgt tcgtcttcca tgcagctcgc tgatattttc acgaagcctc tatctccagc 60  
tctctntcaa ggtctctgtt ccaagctggg aatgatgaac atccattcct agcttgcggt 120  
gggctctcaa caatagcttg ttagttagaa aaagctgtta gagttagttt tctctctggt 180  
gtaactaact aaccaccggt tttctctatc cttcatatgt gtataaatat cttacgaatt 240  
cagtaatana gacatgcaat tatttgggtc tctcacgtac acttgcgctg tttctctctc 300  
ctttatggct gttgatccat ttaatatattg ttccgtgctt tcccctgnac gacgttttcg 360  
agtagagaaa tgatgcattt cgaccgggtg cgttggaagc gaacgacgaa ttgtgtagtg 420  
aaagagaagg actctcgcgt 440

<210> 4849  
 <211> 452  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4849  
  
 accttacctt ggctntcatc anantgcct ttacctcaa gataatccca aacaactttt 60  
 cacactcatg gtggacatta caagtatcat gtgatgtcgt ttgacctctg taatgctccg 120  
 acaacatttc gagccactat gaatgacatt ttttgcctc tgttgtgcaa aacggtgatt 180  
 gcattttctg atgatatttt ggtctatagt gctgacctg atcttcacat atcccatctc 240  
 tcttaagttt ttgaaagttt ggctcatcat tagttntttt ctattaaact tgagaaatgt 300  
 gtgttctatc agccttagtt gtctacttag gccatgtcat tttttgcggg tttagtggcc 360  
 cttattcctt ccaaggtcca ggcgattcct aagtggccaa ttcctaagaa tattaaaggc 420  
 ttgcacatcc tcttatgttt gttgggcttt ta 452

<210> 4850  
 <211> 435  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4850  
  
 ctccctttt gaagctcgat gtgagccata tctcattgga tgtgaatctg ctgaaagaat 60  
 tngcttatct taagaattcg acccttatgg accttatgaa taacagattc tctggagggt 120  
 tgacattgag tattcaagag atgtattcct tagaggaaat ggttctgtcc aacaatgcaa 180  
 taggtggnga tatcatgacc cttaagtggg aaaaccttca caacttgatc attttggatc 240  
 tctctaacat ggagttgaaa ggggaaattc ctgagtctat atcggaatta aagaggttga 300  
 ggttttttagg ccttagtgac aacaacctca caggcaacct ttcaccaa atctctactc 360  
 ttccttgtct caatgcacta tatgttagtg gcaacaattn gacaggagag cttatattct 420  
 ctgtgtgagt ttatg 435

<210> 4851  
 <211> 412  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4851

agcttcatgc ttatgtatgt atggcanaac ttcattattg ttgttcaaga catacaagtg 60  
agcttgtaaa aaatcttcta cacttgaagt gatcacatgc aatcctcttg aacccttacc 120  
accactctg tcatcatgcc gagacttatg aaggccaaca ggtttagcct tctcaattta 180  
ttctgaacaa aattcaatgg cttcttcagc aatgtacctc tcaacaatag atgcttctgg 240  
atgataaaga ttctttgtat accctttcaa gatcatcatg tatcgctcaa ccgggtacat 300  
ccaccataga taaacaggac cacaacattt gatttctctg actagatgca caatcaagtg 360  
aatcatgatg tctaagacag caggcggaga atacatctcc aactgacaca gt 412

<210> 4852

<211> 475

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4852

gattcagcta tcggcgaagc tgttcatggt catgtntgga aacatggggt tgatttcat 60  
gtgtttgtgc agactactct gattgagttt tattcaactn tcggtgatgt ggggtggctca 120  
agaaggggtg ttgatgatat gcctgacaga gatngttttg cttggacgac gatgatttcg 180  
gctcatgttc gggatgggga tatggcttct gcaggcagat tgtttgatga gaatgcctga 240  
aagaatgtag ctacatggaa tgccatgatt gatgggtatg gaaaattatg gaatgctgag 300  
tctgtctgag ttttgtttta ccaaagcct gcaagggata ttatttcttg gacaaccatg 360  
atgaattgct attctcgga canaaggat aaagaagtga tagcactttt tcatgacgtg 420  
attgacaaag gaatgattcc tgatgaagt actatgacca ccgtcatttc agcat 475

<210> 4853

<211> 485

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4853

agcttaagtg cttatacaaa anatgggctt caagatacta taatgtggaa aataataaat 60

aaagtttctc tcgaanaaag actaacaaag aanacatcat tggatgatgct agctatttta 120  
gtttgtcaaa ttatttatat ggaagttatt taataattta gagacaaatg tgtataattg 180  
tatattattg taaaaagata ttattcaaca ttgatttatt tttcttcata aaattctttt 240  
aaaaatgaaa taataaatga attgctatcg agaactaaga acaactgatt aatcgtctta 300  
atacaattga ttgatgcagg aaatgtatcc ctataaccac cttaaaggga acatcathtt 360  
atataaaaaa actggttcta tatntacttg actgagtctt tcgttataat ctagaaatgt 420  
aataaataaa tagacacctc tttagcatca tagatatttt ttatatgata tatggtcaca 480  
ttatg 485

<210> 4854  
<211> 434  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4854

ctgccaaccc atggaagctc ctaatatctc ccacactntg tgtggtgtgc cattcttgga 60  
tggccttgat tttctcatgg tccactagga cccatttct accaactaca aaccctaaaa 120  
aaactatatt atctacacaa aacgtacact tctctatatt tgcataaagg gtgtttttgc 180  
taaggaccga aagaacttgc ctgagatgtc ctgagagatc atctaagctc ctactgtgca 240  
ctaaaatatc atcaaaataa acaactacaa atctacctat gaaatgcctt aagacatgat 300  
gcataagcct cataaagggtg cttggtgcat tagtgagccc aaaaggcatc actatccatt 360  
catacaaacc aaacttggtc ttgaaagcgg ttatacactc atcacccttt ttcataccga 420  
tgtggtgata ccca 434

<210> 4855  
<211> 316  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4855

ggaatcatac ctactgtga taagttatga gcgtatgaat ttcacgttat cttgcgctgn 60  
ccaatttgca gcactcgtc ttattatgag cccgaatcgg acatccgctg gaaaagttat 120



gaccatttgg atctgtcag agctttccat gacgaatttc cgacgtatcg atttaatggt 180  
atccaccgct cggacatcgc gagtgaatac gttctgacgc atttgaattt caccgagagct 240  
ttcgttgctc aatttcgagc gtctctatat gtgatgcgcc ccaattggac atccgagttg 300  
aatgttatga ccattt 316

<210> 4856  
<211> 303  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4856

agtcacctgc ngctgcagct tgcaaaattc aacggttaga acttgctact tgtatgtccg 60  
actcaggcgc atcacatata gaggcgctcg acaaggaaca acggaagatc tcaagaaatt 120  
caaatggtca taactcttca cacggatggt cgattatggc gaatcacata tctcaacgct 180  
aaaaaatata caacggaagc tcttgagaaa ttcaaattgt cataactttt aactgggatc 240  
tccgattcac gcgcatcaca tatagaggcg ctccaagatg aacaacgaaa gctctcgaga 300  
aat 303

<210> 4857  
<211> 467  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4857

tatnntgaat tgtactctat tgtataaagg atcgattata agttattntg aacttatttg 60  
tataaaggat cgattatgca tgattcacaa acataaatct atggaaatat aaaacttaag 120  
attgtttatc caataccata taatttactt attttaacca acatttatat cgagaacttg 180  
tttaataaca agtttttagtg aaataatatt tatttattac actttacggc aattatagat 240  
cctaaaatgc cttcttaata gctgctgcc attcatcata ggctacttcc caagcactgc 300  
tcaactcgtc actccatttg tccccaactg tcttcttaat agcatatgcc aattcatctc 360  
aatttccttc caccatca atggggaaca gtgacaggac gactactagt cctagatggg 420  
tatatgtata tngcttaatt aacttcattt tattcttta ttacata 467

<210> 4858  
 <211> 301  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4858

tctggtggga catcttgact tgctttccaa tctgacattc accacagatt ctgccttctt 60  
 ctattntcag attgggaatg cctctaacag catctttgtc aatgattttc ttcatgcctc 120  
 ttaagtgcag atgtccaaat ctttgatgcc atattctgac ttcattcttct ttggagaata 180  
 gacatgtgga ggagtagctg gtttcttgag gtgtccataa gtaacagatg tactttgatc 240  
 tcctgccctt cattaggact tcaactcttct catttgtcac caagcattct gatctttgtg 300  
 a 301

<210> 4859  
 <211> 276  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4859

agctngaate ggacatccgn gtgaaaagtt attaccattt gaatttctca agagcttccg 60  
 ttgttcaatt tcgatcctct cgacatatta tgcacccgaa tcggacatct gtgtgaaaag 120  
 tcatgatcat ttgaatttct cgagagtttc cgatgtttta tttcgagcgt atcgatatat 180  
 tataaccctg aatcggacct cagtgtgaaa agttatgacc atttgaattt gacgagagct 240  
 tccgttggtc aatttcta atcactgtat gtgatg 276

<210> 4860  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4860

agcttatgct gcaaacattt ataatagacc tcctcagcag caaaaccaac aacaacagaa 60  
 taattatgat ctttcaagca acagatacaa tccaggttgg agaaatcatc caaatctgag 120

atgggcaagt cctccagaac aacaacagca tgtccctcct ttctagaatg ctcttggtcc 180  
aagcaagcca tatgttcctc ctccaatata acagcagcag tcataacaaa gacaacaagc 240  
aactaaggct cctcctcaac cttccttaga agagtttagtg aggcaaatga ccatccagaa 300  
tatgcaattt cagcaagaga caagagcctc cattcagagt ctaacanata agatgggggca 360  
gatggctact acagtgaacc aagctcagtc ccaaaattat gac 403

<210> 4861  
<211> 325  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4861

tctagatgag ttatgtctgc gaatcggaca tctgtgaaa ttgtttttct catttgaatt 60  
tctcgagtgc ttccgttggt taatttcaag cgtctcgata ttntatgtcc tcaaatacaga 120  
catcggagcg aaatgttatg accattcgaa tttgtcgaga gcttccgttg ttcaatttcg 180  
agcgtctaga tgagttatgt caccgaatca gacatctgag tgaaatgtta tgaccattcg 240  
aatgtgtcga gagcttccgt tgttcaattt cgagcgtcta gatgagttat gtcaccgaat 300  
cggacatccg tgtaaaaagt atgac 325

<210> 4862  
<211> 314  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4862

ggaatcggac atccgtgtga naagttatga ccatttgaac ttctcaagag cttccgctgg 60  
tgagtttcga tctctcgcac atattatgcg cccgaatcgg acatctgtgt gaaaagtcac 120  
gagcgttcga atgtctcgag agttttcgat gtttaatttc gagcgtatcg atatattata 180  
accctgaatc ggacctcagt ctgaaaagat atgaccattt gaatttgacg agagcttccg 240  
ttgctcaatt tcgaatgtca ctgtatgtga tgcgcctaaa ttggacattc gagttaaag 300  
ttatgaccat ttga 314

<210> 4863

<211> 318  
 <212> DNA  
 <213> Glycine max

<400> 4863

agctttttgag aaattcaaat ggttataact tttcacacgg atgtagatt aaggcgcac 60  
 acatatagag acgcacgaaa atgaacaacg gtagctctcg agaaattcaa atggatcatca 120  
 cttttcacac tgaggtctga ttcgggctta taatatattg atatgctcga aattaaagat 180  
 cggaagctct ctagatattc aaatgggtcat aacttttcac acggatgtcc gattcgggag 240  
 cataatatgt cgagaggctc gaaattgaac aacggaagca ctcgagaaat acaaattggc 300  
 ataacttttc acacggat 318

<210> 4864  
 <211> 332  
 <212> DNA  
 <213> Glycine max

<400> 4864

agcttcctat ggatttaata gtgtcaccat tttcaccaa gtaaaccagc aaagagggga 60  
 tccctcttgc tgtctgattt tcaattggac aagcacgtga attggaattg tgagcttagc 120  
 accaattaca atgttgacaa gagcataata attctgacct atcattgcct gacatgtggt 180  
 gaggccttgg aagggtttctt ttaccaactc ataataagtg tcattcttgc ttgtagagta 240  
 ggggtgtgta tactggtaaa tgtttcttga aacaaaacat atgaacaatg attgacttat 300  
 cggacttttt aaatatacat tataaaacta at 332

<210> 4865  
 <211> 351  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4865

agctntctaa acagttaaaa ttgagaagag atacaactgc ataaagagtc atctattttt 60  
 gaccaaactc aaattttgat tttttataaa ttatttcttg ttataaattt gattttgtat 120  
 aaattctcta ttgttatattt gattttgtat gaattctctc ttgttatant ttattttcat 180  
 taaccttgat gcgtacgatt tgnnttagct tgttcttttt cctttatgtg aggtaaattt 240

cctacaaata aatcattatt tgatccagat attatcaaga ctaataggaa gaacaagaag 300  
gaaaagaaac aaacaacaac taagccaccg ggtgaatctt cttgtactaa t 351

<210> 4866  
<211> 428  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4866

agctntagca actctttctt tntgtttagt caaaacctct aatgctctta atctctctc 60  
atctaaatca accaactcat ctaacatcat tttccaataa tggtcgattg gaatgtccat 120  
ttgtttttgt accctggctg attgcaaattg tatttcgacc ggaagtacag catcatgccc 180  
ataagtcagt cgaaatgggg tagtattagt tgattcctta ggagaatttc tacatgccc 240  
tagaacttga tctaactgtc tattccaatt tcttggtttt tgggcaatgt gattttta 300  
caagttaatt acaatcttat tggctgcttc gacctgacca ttagtttgcg cgtaatattg 360  
tgttgagggt aataatccaa agccaatttt tgggcaaatt cttttatttt ctgtcacgaa 420  
aaactgaa 428

<210> 4867  
<211> 316  
<212> DNA  
<213> Glycine max  
<400> 4867

tctcgatata ttatgcgcct gaatcagact tccgttacat tatttatgac catatgaatt 60  
tctcgagagc ctctgttggt caatttcgag cgtcttgata tagtatgcmc ctgaatcgga 120  
cttccgtgtg ataagttatg accatttgaa tttgtcgaga gcttccgatt ttcaatttag 180  
agcttctcga tatattatga acctgaatcg gacttccgtg tgacaagtta tgaccatttg 240  
aataacctaga tagcattcgg tgttcaattt cgagcgtctc gatatattat gcgcctgaat 300  
cggactttcg tgtgac 316

<210> 4868  
<211> 370  
<212> DNA

<213> Glycine max

<400> 4868

agcttctcga tatattatgc gcttgattct tattttcgtg tgaaaagtta tgaccattgg 60  
aatttctcga gagcttccga tgttctatct cgagcgtctc gatatatattat gcacctgaat 120  
cggacttccg tgtgacatgt tatgaccatt ttagtttctc gagagtttct gttgttcaat 180  
ttcaagcttc tcgatataatt atgtggctga atcggacttt cgtttgaaaa gttatgacca 240  
tttgaatttc tcgggagctt tgggtgttca atttcgagcg tctcgatata ttatgtctct 300  
gaatcggact ctcgtgtgac aagttatgac catttgaatt tcacgagagc attccgtggt 360  
caaattcgag 370

<210> 4869

<211> 406

<212> DNA

<213> Glycine max

<400> 4869

cttgaaatct gaagttaaat attcaaata tcaatgttct tataaaatgc acacacatga 60  
cctctattta tagcctaagt gtcacacaaa attggagggt ttgaaattga atttgtggag 120  
ccaaactttg gagccaaaat ttcactaatt atgattagtg aattttattt atgggttcagc 180  
ccactaatcc aagatcaaata ataataattc ccactaagtg tgcttaggtg tcatgaggca 240  
tgaaaagcat gatggacatg cacaaagtgt gactatatga tgtggcaatg atgtgtagta 300  
agcaaagct cacctgcccc tctaaaattt aattggatgg agcttctacc aattcaatta 360  
aatttatttc caaccacaca cattatatat ccacttaatg catgtg 406

<210> 4870

<211> 308

<212> DNA

<213> Glycine max

<400> 4870

ctgtcaaatt gctgggatta ctattgctgc gaccataact ctatgcaatt cctctcatga 60  
taccagata tgtaagaatt gtaagatagg aaaacagggt ccgcgtcagc caggactatg 120  
tgagcaatt gttcctcgat cctgtgatca tgttcataa gtttagtctt tgctttagtt 180

cgctttgctt gactcatgat atgctctact cttttattac tattttggga tgtctcttac 240  
taggtaaagg atatttgcaa cctgggtgtag aaacatgtcc aattgatccc tggctcgtgg 300  
atcctgac 308

<210> 4871  
<211> 419  
<212> DNA  
<213> Glycine max

<400> 4871

agctagcatg gggctttggc ttgtgtgata tggccattca ctccgccaca gtggatggag 60  
cttgaacatt ttgctaattt agttgatgaa caattattta gttattaata catagctttt 120  
ttgttttggt aataatataa ttctcaccat tatttagtta ttaatattha gttttttatg 180  
cattaacact agattgcttt ttaatgggtat attgcatatt aaaaaacgac ccgtgcgtta 240  
cgcacggggt tatattataa taacgatatt gtgatagcaa tataggatcat tttaaactta 300  
ttaatactat ttagtttttg gattggacta cataaaccaa tcattttatg tctaaaaata 360  
tttcttttta aatatgataa tagtgtcata atgatttttt aattcatagc ctctcctt 419

<210> 4872  
<211> 321  
<212> DNA  
<213> Glycine max

<400> 4872

agcttcaaca tcagaccact ttttgggtgct ggaactactt cacatggact tgatggggcc 60  
tatgcaagtt gaaagccttg gaggaagag gtatgcctat gttgttggtg atgaatcctt 120  
caaataaaa cgtgacgaga ctatccttat cttctagtgg cacaacagtc tagtccaaag 180  
attactecta ttaagtcaaa gagaaagcga ctgtgtgatc aagagaacca ggattgacca 240  
ctggcggaac ttagagaaca caggatgaat ctacttttat catcctgagg aagcgcatgg 300  
ttaaacaatc actaattctt a 321

<210> 4873  
<211> 325  
<212> DNA  
<213> Glycine max

<400> 4873

agcttaccaa agactacatg tttcctgcat aatggccaca taactgtaca gtcaggcatt 60  
ttaccttgcc aacccccaca atcaaaaatc aaaatagaac atccatgtaa gaagtaaaat 120  
gctgccaaata attaaccaga cacacaaacc tatcaagatg atgacagct ttcaaagtga 180  
taatgaaatg ggaaccgagt gtgtcacggt ctgcaattgc cattgataaa aggccagtag 240  
catcatgctt tagcctatgt gaactcatct aaacaaatca cagatacata atacattaat 300  
tattaaatac aacactacag tacta 325

<210> 4874

<211> 301

<212> DNA

<213> Glycine max

<400> 4874

tatttcagta caatacccaa agcttggtga ttttctcctt cattctgctc ccaattccaa 60  
ttcttttgtt cttcaaagat tacatctttg ctaattataa tatttctgtt gactggatca 120  
aataatctat atgccttgga ttcactactg actccaaaca aaacacattg cttactcttg 180  
tcatccaact taaccgctg ttggtctggt gtatgaacat gagctaggca atcaaatacc 240  
caaaaataat taacagaagg cgtaattcca ctccatgctt ctttaggagt tttgtcttgc 300  
a 301

<210> 4875

<211> 452

<212> DNA

<213> Glycine max

<400> 4875

tctcatcaat ggtattataa tttccatcaa gtcattacct catatgggtt tgaggcaaata 60  
gtagttgatg attgtgtgta tcataagttc agtgggagta aatacatatt attgctagca 120  
atgatatagg cttcttggaa gaggccaaaa gatttctaac gaaaattttg aaatgaaaga 180  
ttttggggaa gccttttttg tgatttcaag atactaagag atcactctca aggtatccta 240  
aggttgttac acgtgaacta tatcgataag gccctagata gattcagcat aaaagatagt 300  
aaataaggag attccccaat agctaaagga gataaatgca gtctcaaaca atgcctcaat 360



aatgaccttt aaagaattga gatgcaagag atttcatata tgtcaacagt aggaggtcta 420  
atgtacacct ccagttgtac tcatcccgac at 452

<210> 4876  
<211> 421  
<212> DNA  
<213> Glycine max

<400> 4876

gacactatga aactaagctt aacattcaat ttcgagcatc tcgatatgtt acgggactga 60  
atcttacatc cgagtaaaaa gatattgtcg tttgaatttg ctcagagcat caacattcaa 120  
tttcaagcat ctcgatacat gacgggactg aatcagacat tcgagtaaaa agttattgtc 180  
gtttgaattt gtcagagca tgaacattca atttcgagcg tctcgatata ttacgggact 240  
caatcaaaca tccgagtaaa aagatattgt cgtttgaatt tgcttagagc atcaacattc 300  
aatttcgagc acctcgatat gtgacgggac tgaatcagac atccgagtaa aaagttattg 360  
tcgcttgaat tggctcagag cttcaacatt caatttcgag cgtctcgata tgtgacggga 420  
c 421

<210> 4877  
<211> 369  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4877

agcnttgagc caattaagac gacaatatct ttttactctg atgtctgatt gagtcccgctc 60  
atatatcgag acgctcgaaa ttgaatgttg aagctctgag ccaattcaaa cgacaataac 120  
tttttactcg gatgtctgat tgagtcgat aatataacga gacgctcgaa attgaatgtt 180  
gaagctctga gaaaattcaa acgacaataa ctttttactc ggatgtctga ttgagtcccg 240  
taatatatcg acacgctcga aattgaatgt tgaagctctg agccaattca aacgacaata 300  
aatatttact cggatgtctg atttagtccc gtcatatatc gagacgctcg aaattgaatg 360  
ctgaagctc 369

<210> 4878  
<211> 393

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4878

ntactgaaag agatcactcc tcgatgtacc aagggtgaat tgcgatgatcc tcaatggtta 60  
gatacaatga aggaagaata catgggttctg acgcagaata aaacatggga tctcgtccct 120  
ttgcctcctc ataggaaggc tattgggttct aaatggatat atcgggttgaa atacaatgtt 180  
gatggctctg tagccagaca taaagctaga ctggtagctc aggggtattc tcaacgacca 240  
ggacttgatt ataatgagac attcagtcctt gttatcaaac acgtaaccat tcgaacggtc 300  
ttgagcattg ctgtcaccag aaaatggaat atacgacaag tagacgttaa caatgctttc 360  
ctaaatgggtt ccattcaaga ggaagtatat atg 393

<210> 4879  
<211> 430  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4879

tgagccaact canacgataa taactttnta ctcggtatgtc tgattgagtc ccgtaacata 60  
tcgagacgct cgaaattgaa tgttgaaacct ctgagccaat tcaaacgaca ataacttttt 120  
tcacggatgt ctgattgagt cccgtaacat attgagacgc tcgaaattga atgttgaacc 180  
tctgagcaaa ttcaaacgac aatatacttt tactcggtatg tctgattgag tcccgtaaca 240  
tatcgagacg ctcgaaattg aatgttgaag ctctgagcca atacaaacga ccataacttt 300  
ttactcggat gtctgattga gtcccgtaac atatcgagac gctcgaaaat gaatggtgaa 360  
gctctgagcc aattcaaacg accataactt ttactcgga tgtctgattg agtcccgtac 420  
atatcgagac 430

<210> 4880  
<211> 338  
<212> DNA  
<213> Glycine max

<400> 4880

agcttcaaca ttcaatttcg accgtcttga tatgttaagg gactcaatca gacatccgag 60

aaaaaagtta ttgtcgtttg agttggctca gaacttcaac attcaatttc gaccgtctcg 120  
 atatgttaag ggactcaatc aaacatccga gtaaaaagtt atggtccttt gtattggctc 180  
 aaagcttcaa cattcaattt cgagcgtctc gatatgttac gggactcaat cagacatccg 240  
 agaaaaaagt tatcgtcgtt tgagttggct caaagcttca acattcaatt tcgagcgtct 300  
 cgatatgtta cgggactcaa tcagacatcc gagtaaaa 338

<210> 4881  
 <211> 308  
 <212> DNA  
 <213> Glycine max

<400> 4881

agcttgtagg aaattcaaac gacaataact ttttactcgg atgtccgatt gaatcgggta 60  
 atatatcgag acgctcaaaa ttgagactag aagctctgag caaaatgaaa tgacaatata 120  
 cttatacacg gatgtccggg tgagtcccgt aatatatcga gacgctcaa attgaaacgg 180  
 aaactcttag aaaattcaac gacaataact ttttactcgg atgcccgaca gattgccgta 240  
 atttatcgag agatgctcca aattgaaaac agaagctcgt atcaaataca aacgacaata 300  
 acttttta 308

<210> 4882  
 <211> 285  
 <212> DNA  
 <213> Glycine max

<400> 4882

tcagctgtag aagtcaattt cgagcgtata ctagattctt tactcaagca gacatccgag 60  
 caatacatta ctgtcgttgg aattagctca gagcttcaga attcattttc gatcgtctcg 120  
 atatattacg ggtctcaatc agacatctga gtaaaaaagt tattatcgtt cgaatatgct 180  
 gagagcttca tcattcaata tcgagcgtct cgatgttcta tgggacttaa tcagacatgc 240  
 gagtaaaaag ctattgccga ttgaatacgc tgagagctgc aacat 285

<210> 4883  
 <211> 238  
 <212> DNA  
 <213> Glycine max

<400> 4883

agctttttgag aaattcaa at ggtcattact tttcactcgg ttgtcagatt caggcgtata 60  
atatatcgag acgctcaaaa tagaacagtg gaagctattg agcgagagaa atggtcataa 120  
ctgttcactc ggaggtccga ttcaagcaca taatatatcg agaggcccga aattgaacaa 180  
cagaagctct tgaaaaattc gaatggccaa ttctttacac tcggatgtcc gatcaggc 238

<210> 4884

<211> 466

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4884

ngcaactttc tcagcagcca cgtaacacaa cacttcatgg ccttcaccc tctcttccac 60  
cttaacctca accctcttct tcttctgctc acattcccca tacacctctt cctcagcttc 120  
atcatcatct tcatcaattt caacaacctc aaaaggacca tcatcctcac tctctcccag 180  
aaactcaaaa cccctttcca tagatttttc aatcttcgca ctgcgcacct cacctccacc 240  
cttgagttct ttcacgaaaa ccaattcacc atcatcgtaa tccaccactc tctcctctt 300  
ccgactcctg atcaaaccac cccgaacctc gactcctttg cttcgcgtcc tacgagctgg 360  
tccagtatac tcattcattt caaacaacaa aaccaacaca naaaaaagac cttttctnt 420  
cctgtttctt cgaacaataa tcagaaacac cccacaacgc aagatc 466

<210> 4885

<211> 346

<212> DNA

<213> Glycine max

<400> 4885

tctcgatata ttacgtccca aattcggaca tccgtgtgat atgttatgac cattcgaatt 60  
tctctagagc ttccattggt caatttcgag agtctagatg agttatgtac gcgaatcgga 120  
catccgtgtg aaaagttagt accattcgaa tttctcgaga gcttccgttg ttcaatttct 180  
agcgtctaga tgagttatgt acgcgaatcg gacatccgtg tgaaaagtta tgaccattca 240  
aatatctcga gtgcttccgt tgtgcatttt cgagcatctc gatataattat gtcccccaat 300

tcagacatcc gtgtgaaaag ttatgacat tcgaattctc gagagc

346

<210> 4886  
<211> 454  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4886

taacataagg catgtgaagt ggggtgaatt cctatagcaa ttcccttatg ttatcaaaca 60  
taaaaaggga aaaggtaata ttgtagccga tgctctttct cggcgtcatg cattactttc 120  
tatgcttgaa acaaaattga ttggtcttga atgtttgaaa agcatgtatg aaaatgatga 180  
aactgttgga gaaatttgta aaaatttgta aaaatattca gaaaatgggt tcttttagaca 240  
tgaaggcttt cttttcaaag aaaacaaatt gcgtgtgcct aaatgttcta ctagaaattt 300  
gcttgtttgt gaagcacatg aaggagggtt aatggggcat tttggggctc aaaagactct 360  
atanacatta caagaacatc tttattggcc tcatatgaaa aaggatgtgc agaaatattg 420  
tgaacatcgc attgtattgt aaaaggcaaa gtct 454

<210> 4887  
<211> 333  
<212> DNA  
<213> Glycine max

<400> 4887

tccttaagaa gattcctaaa gaagctagag cttagctaca cttacctctc taatagctaa 60  
gtcacctcc ttgagatgag aagctagaac ttagctacac accccctata atagctaagc 120  
tcaccccat gacaaaaaac atgaaaatac aaaaaaaaag tccttactac aaagactact 180  
caaatgtcc caaaatacaa ggctaaaacc ctatactact agaatggcca aaatacaagg 240  
ctaaaacgaa ggaaaaacct attctaatat ttacaaagat aagcgggctc atacttagcc 300  
cattggctcg aaatctaccc taaggctcat gag 333

<210> 4888  
<211> 399  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 4888

tacggacact ataaaaactca agctngtaaa cgattctatg aaccatacca agttttggac 60  
catattggct aggttgcata caaacttcta ttgcctgaga gatcccgcat tcatcctgct 120  
ttccattggt ccttccttaa acccttccac caaacatctg aagaatattg tgtcccacta 180  
gcattgactt ccaatgatgt tgaaaatcaa ccagctatct ctcttttagc cattctgggc 240  
actcattatg cctctgagtc tactgatcca aagctaaggt attagttcaa tgggcagggt 300  
tgtctcttga tgacattaca tgggaagatt gggaagaact caagactgtc tatcaccttg 360  
tggacaaagt gtttttggat ggcgcaaggg atgatagga 399

<210> 4889

<211> 463

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4889

tatacaaact gactcattac ctttgttatg caaacgctat tattattatc aagttcagaa 60  
ggatcaatct catactccgg gacttcacga gcattttgca catgcatggg agccatctac 120  
caaaaaaaaa aaagaagttc acaattgaaa cagatatcat aaaccaacta ttctaaaaag 180  
agttaacaa ttatgcaatg tcagttgaat tgttttatac gtaaaaatca accctttttt 240  
tttactctct aacagtaatt ccgatattat tatagtcttt ttagtgaata atacaaaaga 300  
aaataataga agaaactttt ttgaataata gttacaaatt cttcatatn ttagagaca 360  
accaacttat atgataattt gtaactaaac atatatcana aactgctggg atgtgtgttg 420  
actttcataa tcattatctt aaaagtcata caaaactact aaa 463

<210> 4890

<211> 343

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4890

agcttctggg gggacatctt gacttgcttt ccaatctgac attcaccaca gattctgcct 60  
tcttctatct tcagattggg aatgcctcta acagcacctt tgtcaatgat tttcttcatg 120

cctcttaagt gcagatgtcc aaatctttga tgccatattc tgacttcac tcctctggag 180  
aatagacatg tggaggagta actgggttct tgagggtgcc ataggtaaca gttgtccttt 240  
gatctgttgc ccttcattag gactttactc ttctcattng tcaccaaaca ttctgacttt 300  
gtgaagttta cattgaatcc ttcacacac agctgactga tgc 343

<210> 4891  
<211> 392  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4891

cttgcctct ntctgtctgg aacatgggta taggcaatgc tttcaaacac tntgagggtga 60  
gagatcccg gcttccttcc actccatgct tcttgtggtg tcttctcatg cacgcttttt 120  
gttggggaac agtttggttag gtaaactgca catgccactg ctttagccca aaactccttc 180  
ggcatcttct tgctcttgag catgcttcgc accatgttaa gtatgggtccg gttctttctc 240  
tctgtactc cattttgttg tggcgatctt ggcaactgtca gtgggagacg gattccatgg 300  
tcttcacaat atttggtgaa ctttaattgaa gtgaactctc ctctcgatc agatctcatg 360  
gccttgatgg aaagaccagt ttctttctcc ac 392

<210> 4892  
<211> 299  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4892

ntctcttttg tgcagctatc tcactctctt tttctagtgt ataataagc tcgacagggt 60  
catgtgcatg tgctgctact aatggaggca cttgaatatg gttgccagac ctcaagggtga 120  
tggcactcac atttttcgga ttttgcacaa tatgtgaagg caatttgcga aagatttggg 180  
actgagcttg attcatctga gtagccatct gtcccatctg gtttgtcaga ctctgaatgg 240  
aggctcttgt ctcttggtga aattgcatat tctggatggt catttgctc actaactct 299

<210> 4893  
<211> 463  
<212> DNA

<213> Glycine max

<400> 4893

tcttaggtgt tattccttcc aatctctttg aagggctctt attctaaatg aagacagctg 60  
tagacactgc ctctccccac aagtacttgg gcagactctt gcctttcaac atgctcctta 120  
ccatattcat tatggttctg ttttttcttt ctgcagctcc aatatgttga ggtgtgtagg 180  
gaggagtcac ttcataaatt atgccttctt gatcacaaaa ttcttgaaat tctgtagaaa 240  
catattcacc accaccatct gttctcaata tcttgattaa tgagtcactt tgcctttctg 300  
ccatattttt gaacttctca aagacttcaa agacatcact cttccttctt attaggtaaa 360  
cccatacttt cctagtcaat tcatcaataa aggatatgaa gtatctgttt ccaccagag 420  
attcagtttg catagggcca cacacatcag agtaaatac ctc 463

<210> 4894

<211> 460

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4894

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acacttcctg agcaggtacg agcagttatg caagtgggat cagcaacttt cattatcaga 120  
gtaatcaagc acagcggaaa ttctgcaagt tgcaaactta caagtcttct ccaggatgtc 180  
aagacatctc acgtgacatc agctntctgc tctgtctccc cctgtctcca tgcttactgc 240  
agcatcttct atcagctact agtcttttcc aggatgtcga gacttctcat gtgacatcag 300  
ctntttgctc ccctgtctt catgctctta ctgcagcatc ttttatcagc tagtagctta 360  
caccaatcat cagcagcagt cccccctca aagtcataa catacaactc ccctcnaaa 420  
tcatgaatca tgcgtacatc gtatcctact gccatacatc 460

<210> 4895

<211> 369

<212> DNA

<213> Glycine max

<400> 4895

agcttcacag tggtagcagc cagcatctc atcgatccaa tgagccttcg cctactgtgc 60



cgtcgccttc gtgcgccacc gatcagtcctg agagctccgc cgccactccg ccgagtcctt 120  
 cttcggcgtc gacgtcgctg tcgccgtcca cgctgggtggc aactcccagc tgcggcgggc 180  
 gcggcgcgag tccgggtgtg aatcggcagg actttttctc gtcggaggaa gagtttcagg 240  
 tgcagctagc cctagctatc agcgcttcca attcggagtt ccgcgaggat cctgagaagg 300  
 atcatatcca cgcggcgacg ctggtgagct tgggatgcc a tcggatcgat tcgacgagga 360  
 acacggacg 369

<210> 4896  
 <211> 223  
 <212> DNA  
 <213> Glycine max

<400> 4896  
 agcttccatc aagttatgac tcatttgaat tctcgagatc ttccgtgggt caatttcggg 60  
 cgtctccata tgtcatgtgc ctgaatcgga ccttcgtaag aaaatttatg accatttgga 120  
 cctctcttga gcttccgtgg ttaatttcga gcttttctat atctgatgtg cctgaatcgg 180  
 gcatccgagt gataagttgt gacaatttca atttctacag agc 223

<210> 4897  
 <211> 301  
 <212> DNA  
 <213> Glycine max

<400> 4897  
 ctcttttgtg cagctatctc atcctctttt tcaagtgtat aatgaagctt gacaggttca 60  
 ggtgcagggt ctgctactag tggaggcact tgaatttggc tgccagacct caatgtgatg 120  
 gcaactcacat ttttcggatt ttgcacaatt tgtgaaggca atctgtcaaa attttgggac 180  
 tgagcttgat tcattctgag agccatctgt cccatctggt ttgtcagact ctgaatggag 240  
 gctcttgtct cttgttgaaa ttgcatatc tggatggcca tttgcctcac taactcttc 300  
 t 301

<210> 4898  
 <211> 353  
 <212> DNA  
 <213> Glycine max

<400> 4898

gggtcttagg gaagaaccta gctagcccaa agtctctaatt cttatgctga aacttctcat 60  
caagaagaat gttgcttgct ttgatgtctc ggtgaacaat tcttaaattg gaattctctg 120  
ggaggatttg taatccccgt gctacaccaa gaataatttg gaatctagag ctccaatgta 180  
gaaattgatc actcttttct gacatcacag aaacatccta ataaggaatt attctcttaa 240  
aactactttc agttctttga attactcatg acacattgga catgggtgtac attttcacia 300  
gatctactac ttctaggaaa gcacttatct ttacatatga taaacaccat gct 353

<210> 4899

<211> 467

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4899

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gaagaacat caacaagtta agtctcatta aacttttcat gccattgttt aggaacttgt 120  
tttaaaccat atagggattt caaaagtttg cacattttgt tctcttgacc atccaccaca 180  
cacccttaa gttgagtc atatatctc ttcgctatat caccattcaa gatagttgtc 240  
ttaacacca tctgatgaat cactaactta tggattgtag ctaaggctat cataatccta 300  
atggaggaaa tccttgtaat atgtgcaaag gtataaaaaa aatctatgtt aggtttctaa 360  
gtaaaccctt tagcaatcaa ccttgctatg ttattatcta tagattcatc acgattatac 420  
attctcttat agatccattt acattcaata ggattagcac ccttaga 467

<210> 4900

<211> 429

<212> DNA

<213> Glycine max

<400> 4900

gaatctcagc ttccatttca atttcgagcg tctcgatata ttacagggtt gtttaggata 60  
ttcgagttaa aacttattgt catttcattt tactcagagc ttccgttttc aattacgaac 120  
gtcacgatac cgtacgggac tcaatcggat atccgattga aaagttattg tcgttagaat 180

ttaetccagag cttctgtttt caatcacgaa cgacttgata ttctacggga cacaatccga 240  
 cattcgagtc aaaaattatt ggcgtttgac tattcttaga gcttccggtt tcaattctaa 300  
 gcgtctcgat atattagaga gctcaatcgg acatctgagt taaaagttat tgtcgttcga 360  
 cttttcttag aggttccggt ttgaatttcg acggtctcga tataatacat ggctcaatcg 420  
 gacatccga 429

<210> 4901  
 <211> 298  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4901

agctntgaga aaaatcaaac gacaataatt tttaacgctg atgttcgant gagacccgta 60  
 atatatcgag acgctcctaa ttgaaaaccg acgctctgag cagatttaaa ggacaataaa 120  
 ttttcactct gatgtccgat tgtgtcccggt aagatatcga gacgctctta attgaaaacg 180  
 gatgctctta gaaaattcta cgacaataac tttaactcc gatgtctaatt tgagccgcta 240  
 aatatatcgg gacccttgaa aatgaaactg agctctatga aagttaacga cataactt 298

<210> 4902  
 <211> 215  
 <212> DNA  
 <213> Glycine max  
 <400> 4902

ctttactact ttcttgatgt acaactccac tagcggtgcc attctatact tcatccgagt 60  
 gaaatgttat gaccattcga atttttcgag agcttccggt gtgcaactat gagcgatcatg 120  
 atataatatg ggctcgaatc gaacattcga gtgaaatggt ttgacaattt cgaattttcg 180  
 agagacttcg ttgttcaatt tgagcggcta gaaga 215

<210> 4903  
 <211> 460  
 <212> DNA  
 <213> Glycine max  
 <400> 4903

gctctggact gagcaccaga tcgtcgctgt ggcagaaact acgctgctca ctctcttgaa 60

ttaggcaacg ccgttcccaa ggttccttcc ttctctgatt ctgtctgata agttgttata 120  
 ttaattgaag aatctaagct tttgaatttt catgagccgg tgttgtttct gaaaccgacg 180  
 tcgtcttact tgaaaaacgg cggaaccatc caaattccac acaacgaggg ctctctgcat 240  
 cacgaggttg agctcgctgt ggtcatcgcc aagaaagcac gtgacgtctc cgaatcctct 300  
 gcgatggatt atgtcgccgg tattcactat tcatttatct tatgccttat cctgctgtta 360  
 accgtgaaaa tcgttaatag atttcttaaa gtatttttta tctctaagaa gttaattctc 420  
 actgctgatt ttatctagag tgagatatta tattcatttt 460

<210> 4904  
 <211> 450  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4904

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 tttggaaatc tactctaaag atacgtgtaa ttatacccat aattatacac actccccctc 120  
 aagctggagc atataaatta tatgcaccaa gcttgggaaca tataaactga attctaggcc 180  
 cccttaagga tttagtcaaa atatctgctg gctgatcatt ggaattaatg aattcagtaa 240  
 caatctcttt agacagtagc ttctcccgaa taaagtgaca gtcaatctct atgtgcttgg 300  
 ttctctcatg gaagactgga tttgaagcaa tatgcagagc agtctgatta tcacaatata 360  
 acttcatttg catcactttg cagaatttca actcttcaag aaattgtttg anccacataa 420  
 gttcacatgt gactacagcc atagatctat 450

<210> 4905  
 <211> 369  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4905

tgctggaaact acttcatatg gacttgatgt ggtcctatgc aagntgaaag ccttggagga 60  
 gagaggtatg cctaatttgt tgtggatgat ttttcagat atacctgggt caactttttc 120  
 atgatagaaa tcagactcct tcgaagtatt caaagagttg agtctataac ttcaaagaga 180

tatagactgc gtcactctaga gaatatggag tgaccattgc tgagagtttg ataactgcaa 240  
 gtttactgaa ttctgcacat ctgaaagcat cactcatgag ttctctgcag ccattacacc 300  
 acaacaaaat ggcatagttg aaaggaaaaa catgactttg caaaaanctg ctagggncat 360  
 gcttcatgc 369

<210> 4906  
 <211> 431  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4906

agcttgcaac ttttataacc gncgatcaaa tttttaattt aataacaact cttgatttaa 60  
 tttaatcatg attagccatt gatcaaaaat tacaattaaa aattgtcgtt cattaagtgt 120  
 taccatattt aacattaatt aaagattaaa ttgatcatat tcatactact tttaatgatt 180  
 tataatgttt tactctactt attaagaaat atttaaacac acataagtct attttttaa 240  
 ttaatgtact ttaaaatata ttttatgagc aataataatt aaaaacaatg attctataat 300  
 ataaaaataa tacattttat attaacgaac agtaattata gtatgtgtta taaatgaatt 360  
 acagatacgt aatatattta aacaatcata ataagctacg tatttttttaa taactatata 420  
 tattttttaa a 431

<210> 4907  
 <211> 410  
 <212> DNA  
 <213> Glycine max  
 <400> 4907

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 aaattatctt ttccattatt caatacaaag catatacaac caaagatatg aatatgtgag 120  
 atgtttggtt ttctgtcact gaacaaatca tatggagttg tctttaagat ggggcttatt 180  
 aaagccctta tttaatgatg tagctatgcy agtggttaacg actttaaccc aaaaatatta 240  
 tggaagacgt gtatcattta ataaagttct agcaatcttt tcaaagatct attatgtctt 300  
 tcaacaacac cattttgttg aggggatcct ggtgcagaaa agttagctca atcccatgct 360

tatcacacaa taagtcaaat tctatatattc atactcaccc tcatgattac

410

<210> 4908

<211> 460

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4908

ntcagaaagc gtngatgtcg agtgtatact atntttcttg catgttggtc gtagcttggtg 60

tcttcttcat agatagggca tgcattgatg cccttaacac tgtatccact caaattccca 120

tatgttggaa agtcattaat gatacaaaat atcattgcac acaacttgaa tgtttcattn 180

tgatacggca accccctcgt cccacaactt tgtcaagtct tcaatcaagg gactgagatg 240

aacatcaatg tcatttcttg gttgtcttgg gcccgatatc atcacacaca acatcatgta 300

ttttcgcttc atgcacaact aaggaggcaa gctatacatt actagcaaaa tagggcacga 360

actgtgttga gtgcttaaac tgccatacag atccattcca tcaactggcaa gtccaagcct 420

aggatntctt gcctcttttt cgaattcttg atacaaacta 460

<210> 4909

<211> 420

<212> DNA

<213> Glycine max

<400> 4909

tacgtctcta aataagtcga ttctgagtgg aaaccttata tccggagtga tcccggagac 60

gctggggctg tgtaaggctt tgcagttgct ggatataagt aacaatagga tcaactgggtc 120

tattcctgat gagatcggtt atttgcaaga attagatata ctcttgaact tgagttggaa 180

ttctcttact ggccccattc cagagacctt ctcaaacttc tcaaaactat ccatcttgga 240

tctctctcac aacaagctca caggtacact cacagttctg gttagtcttg acaatctagt 300

gtctctaaat gtctcctaca atagcttttc tgggtctctt cctgatacaa aggtcttccg 360

ggatctaccc actgctgtcg ttgctggtaa ccctgtacct tgcattagca tgtgtcatgc 420

<210> 4910

<211> 439

<212> DNA

<213> Glycine max

<223> unsure at all n locations  
<400> 4910

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aaatgaaagg aatcagaact gggttgcctc ccaggaagcg ctcttttaac gtcattagct 120  
tgatgcatat acctcaatag gtgatattaa atttggccct cactttcagg acctccctta 180  
cctgtaagca aacattttgt tctggcacag gcttgtcttc taaaaataaa tcaaaatcaa 240  
ttctttgatc ttcaaaaccc atttctagtt tctttcttcc caagattaag ggaatgtcat 300  
tatcttcaca gatattcatt acaacaaagt ctgttgggaa gataaaatgt tttactctga 360  
cctaaacatc ttcaattact ccgtatggtc tggtaatgga gcggtcaacc aactgtagag 420  
tcattctagt gggcatgat 439

<210> 4911  
<211> 347  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4911

agcttaaagg aagtgaacga attagcatgg ttataattgt ctccacattg attggtaaatt 60  
ctgctcccca aattcctgaa aaatgtaaag atccaggtag attcagcata ccttgtatta 120  
tagggaatag taagtttgac aatgccatgc tagatttagg agcttctgtt agtgttatgc 180  
ctctgtctat atttaattct ctatctctag gtcccttgca gtcaactgat gtggtaatc 240  
atntagctaa tagaagtgtt gcctaccctg ttggtttcat agaagatgtc ttaggttagag 300  
ttggtgaact ggattttcct ggtgattntt atatattgaa tatggaa 347

<210> 4912  
<211> 471  
<212> DNA  
<213> Glycine max

<400> 4912

atacaatact caagcttatg agataggact accattcatt aaaaagcctg gcccataaca 60  
caagaatgac ttcatagagt ctcaagcttt accagtcctt gataaactcc tagaagatgt 120  
aagcatgcat ctctacagca ctattgtccc tatcacgttt catatcagat gcgtgagtgt 180

gcaccttaat tagcaataga aataggtagg tttgttagta aaatacctgt ctacacatta 240  
aattaacgca atgtggggag gaactgtttc cttgcctgaa aaggcatttt cggaatcgaa 300  
acgagaatgg agacgattat cacttggttc aacaaagcca tttcaaata ttggcgtgtc 360  
gaaattgctc ttgtttcaat atgtgacaga gtcattatct gcagacgtct tcgctgaaat 420  
gatatgacca atatatttaa gccactccag aacataatta aaatacattt t 471

<210> 4913  
<211> 406  
<212> DNA  
<213> Glycine max

<400> 4913

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tactcctttt aagagctgga cttagggagg aggaaagaac aagcatagct aggttcctta 120  
gtgggcttaa tatggaagtg agggacaagg ttgaactcct tccatatagg gacctagatg 180  
agctagtcca actttgtata agagtggagc aacaacttaa aagaaagcct tcttcaaaat 240  
cttatggctc tcaactcttat ccaaggaagg accaagccta tggaatttta ggggctgcac 300  
cttcaaaacc caaggaagaa tagggtaaga ccatagagaa atacaccctt aagactagtt 360  
cccaagaaag gactaacaac attaaatgct ttaaattgtct tgggag 406

<210> 4914  
<211> 465  
<212> DNA  
<213> Glycine max

<400> 4914

taagcaaaag tttcatttaa actactcttc caaaactttt atataaaagt aaataaatga 60  
tattgtctat tgtacttaaa tataaataaa ttttaattaat tttatgccat ttaatgttat 120  
cattcctaaa atattattct ttcgtctaatt tctttttcta tcttgaatga ctctcttatt 180  
tatgataata agtttcaaat gaaagatatt ttaaaagaaa agaaaattat tatttttact 240  
ttttcacgta agattaaatg atggtaggag atgtggagtg gacttgagaa tagatatgtt 300  
ttgcttacct tcataggcta gttttttcta aaagataatt tattcttttg tacagagact 360  
cctttgtcat gtatatgata gcattactta aaagtaatgc atgtattatc tcatggaatt 420



caagataatg atatatgata gtttattcat tctttgatat catac

465

<210> 4915

<211> 378

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4915

agcttcatct ggaaaagtat catagatatt gttctccttg gaagtgactt tttcattcac 60

aagtctagat aggtgggttag ccactaaatt ntcacttccc ttcttatcct ttatttcttg 120

atcaaattcc tacaacataa gtatccacct aataagtatt tgtttggaat taggcttagt 180

taagaggtac ttaatgtag acaagtggcc tcagatatct taagaagggg ggggtgaatt 240

aagatattcc aaacttttct cctaattaaa aatctatctt actttntact taagttatga 300

attcccttaa tgacaatctt cttacatatt aattcatatg aagcaacttg aattatgaat 360

attaagcatt aatatata 378

<210> 4916

<211> 325

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4916

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attgngttta acattaaaaa cacaatgttg tatcatcctc aacaatctaa cagcgacttt 120

tgttnttcct gcatcacaga gtccgttaat taaagtcccg taggtgattt cgttgaattc 180

gaatccatcc gcgagcattt cgtcgtgaaa tttgagcgcg gtggaaacgg cgccgttgag 240

gcagatgccg ttgatgaggg tgttgaccgt gacgacgtcg tacgggagac cgcgctngag 300

aagcttcccg aagacggaga atgcg 325

<210> 4917

<211> 305

<212> DNA

<213> Glycine max

<400> 4917

agcttgcaaa ctaggtactt atttgcaacc tgaaagctag gaggacgctg tgtcataaat 60  
 actgactcct caagaaaccc atttagaaaa gcattgttca catcaaactg aaataactct 120  
 caccatgtg aaagagcaag agtgagaaca atacgaattg tgacaggctt gaccacagga 180  
 gaaaatgtct catgaaagtc aaaaccccat gatgaaaacc cttagctacc aaccttgctt 240  
 taaacttggt gatggaacca tcaacatttt cttttactct aaaaaccac ttacactcaa 300  
 tggca 305

<210> 4918  
 <211> 474  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4918

acggaccttg aaactaagct taaggaagtg aaagaattag tatgggcaga aatgtctcct 60  
 tattgattgg taaatctgtt ccccaaatcc ctgaaaaatg taaagatcca ggtacattct 120  
 ccatacctag tattataggg aacaataagt ttgacaatgc catgctagaa ttaggagctt 180  
 ctgttagtgt tatgcctctg tctattttta attctctatc tcttggcctt ttgcagtcaa 240  
 ctgatgttgg aattcattta gctaatagaa gtgttgctta tcttgctagt ttcatagagg 300  
 atgtcttagt tagagttggg gaactgattt ttcccgttga ttnttatatt atgaatatgg 360  
 aggagggatt ttcttaagga tcagttccca tcattctagg cagaccttta tgaaaactgc 420  
 tagaacttag atagatgtat atgtaggcac actatctatg gagttttgtg atat 474

<210> 4919  
 <211> 350  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4919

agcttatcat tctctacgtn ganttattag ttaactgtct tncgcctctc acattcttgg 60  
 ttcttacttc cctctaaatt tggcttagag ctttgtcat actcattgct tcttattttc 120  
 ctttccgaac aagaaattcc taataccaac aacacaaatt ttatgagttg gaaaccttga 180  
 ttttttgta gcatgtctcc aacaaaaaac aattagaaaa gaattgcatt ttagacctta 240

gaaagcatta tcctcgctcc aacatgcttg ttatcccatc caaaggtatt gtcagaatct 300  
gcagcccccga gtgtctgtcc attaattctta atgtagttaa ggtacattgg 350

<210> 4920  
<211> 587  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4920

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cacagtggcc aaagatgcat gggagatcct gaaaatcact catgaaggaa cctccaaagt 120  
gaagatttcc agattgcaac tcttggtctac aaaattcgaa aatctgaaga tgaaggagga 180  
agagtgtatt catgacttcc acatgaacat tcttgaaatt gccaatgcct gcactgcctt 240  
gggagagagg ataacagatg aaaagctggt gagaaagatc ctgagatcct tgcctaagag 300  
atttgacatg aaagtactg caatagagga ggcccaagac atttgcaaca tgagagtaga 360  
tgaactcatt ggttctcttc aaacctttga gctaagactc tcggataggg ctgaaaagaa 420  
gagcaagaat ccggctttcg tgttcaatga tgaaggagaa aaaaatgaag ttgacctgga 480  
tactgatgaa ggtctgacaa atgcagggtg gcttctttgg nagcagggtca acaaagtgct 540  
aaacagaatg gacaagaggc agaaaccaca tgtccagaac atccctt 587

<210> 4921  
<211> 534  
<212> DNA  
<213> Glycine max

<400> 4921

agctttgagc caattcaaac gacaataact ttttactccg atgtctgatt gagtcccttc 60  
atatatcgag acgctcgaaa ttgaatgttg aagctctgag ccaattcaaa cgacaataac 120  
tttttactcg gatgtctgat tgagtcccgat aatatatcga gacgctctaa attgaatggt 180  
gaacctctga gctaattcaa acgacactaa ctttatactc ggatgtctga ttgagtgcg 240  
taacatatcg agacgctcga aattgaatgt tgaacctcta agccaattaa aacaacaata 300  
acgttttact cggatgtctg attgagtcct gtcatatatc gagacgctcg aaattgaatg 360

ttgaagctct gagccaattc aaacgacaat aactttttac tcggatgtct gattgagtcc 420  
cataatatat cgagacgctc gaaatgaatg ttgaagctct gagccaattc aaacgacaat 480  
aactttttac tcggatgtct gattgagtcc ccgtatatat cgagaccctc gaaa 534

<210> 4922  
<211> 337  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4922

agcttgacgc aaatgcaaac cacaagaact tttaactcca atatccgatt gagtcccgtc 60  
atatatcgag acgctcgaaa ttgaaaacag aagctctgag caaattaaaa caacaattac 120  
tttttactcg gatgtccgaa tgaatccagt aatatatcga gaactagaaa ttgaaaacag 180  
aagctcgtaa caattgcaaa ccacaattag ttntaactcg gatgtccgaa taagtctcgt 240  
aatatatcga gacgcttgaa attgaaaaca gaagctttga gcaaattcaa atgacaatta 300  
ctttttactc ggatgttcga atgaatcccg taatata 337

<210> 4923  
<211> 311  
<212> DNA  
<213> Glycine max

<400> 4923

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agggtcaaat gagaaactaa tgccacata atacaaagag aatattactt atatacaaga 180  
gaaaaagtct taatgaaatc gattccttct ttggagtaaa tcccttagca acgagtcttg 240  
ccttgatctc ctcaatgatg cctaataaat cttttttggt cttaaagacc catttaatac 300  
caatatactt t 311

<210> 4924  
<211> 539  
<212> DNA  
<213> Glycine max

<400> 4924

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 cgggagagga aggggagggc gcatatgcag gtctggtacg tgccgccgca cgcgcggagg 120  
 ttgtcagcga tccagtcgtg catgcggttg gcgtgttgga tgaggccagg gaggctgccc 180  
 aataggggccc agacacgtgg acctttgagg gagcgagtga ccaaggtgaa ccatattaaa 240  
 taggccgcta ttgctgatag gatcattaaa gccgttgctg cgtccatgtg agtgctgggc 300  
 ccaactccca aaacaaaaaa ttaaaccctt attgcttgca ccttcctca ccggaggagc 360  
 tagaggctgc tattaccatc accacgcaa ttcaattgga tccattgcag cttaaattgag 420  
 gaaagtaaac cctagctgtg tagtattcaa gtgggggcta aaacgggagt gatagatgaa 480  
 attattgtgt tcaactaaaa aatgtgcaag tggttttgat tggatgaataa ttgagatct 539

<210> 4925  
 <211> 537  
 <212> DNA  
 <213> Glycine max

<400> 4925  
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 tttcacattg tctgctccac catgaaaccc ccagatgtct aagaggatca catatttctg 180  
 aaggcttttc ctcatcatt agagggagtg gcaaaggact ggctgtatta ccttgctcca 240  
 aggtccatca cgagctggga tgaccttaag agagtatttt tagaaaaatt tttccctgct 300  
 tccaggacca caaccatcaa gaaagatatc taaggattta gacaactcag tggagagagc 360  
 ctgtatgagt acttgagcgc atttaagaaa ctatgtgcca gttgccctca ccatcagatt 420  
 tcggagcaac ttcttctcca atatttttat gaaggactcc agtatatgga gagaagtatg 480  
 atagatgctg ccagtgggtg agccccttga gacatgactc ctgtgaagcc aggaatt 537

<210> 4926  
 <211> 543  
 <212> DNA  
 <213> Glycine max

<400> 4926  
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tctccttttg aagttgttta tggttttaac ccactaactc ttcttgatct tttgcctatg 120  
 cctaattgttt ctgttttttaa gcataaagaa ggtcaagcaa aggtggacta tgtgaagaag 180  
 cttcatgaga gggcacaaga tcaaattgag aggaaaaata aaagctatgc ttaacaagcc 240  
 aacaaaggga gaaagaaggt tgtcttctaa cccggagatt gggtttgggt gcacatgaga 300  
 aaagaaggt ttccggaaca aaggaaatca aagcttcaac caaagggaga tggaccattt 360  
 caagtgttg aaagaataat gacaatgcta tcaagttgag ctaccagtg agtataatgt 420  
 tagtttcacc ttcaatgtct ctgacttata tctttatgat gcagatggag aattccgatt 480  
 tgaggataaa tccttctcaa gagggagaga atgatgagga catgaccaag agcaagggcc 540  
 aag 543

<210> 4927  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<400> 4927  
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 ggacatctga gtgaaaaggt atgaccattt gaatttctcg agagcttccg tttttcaatt 180  
 tcgagcatct agatatatta tttcccgaa tctgacatcc gtgtgaaaag ttatgaccat 240  
 ttaaatttct tgagagcttc cattgttcaa tgtcaagcgt cctgatatgt tatgcgccta 300  
 aatcgacat ccgagtgaag agtcaggaca atttgaattt ctagagagct tttgttgttt 360  
 aatttcgacc gtgtcgatat attatgggcc ggaatcgaat acctgagta 409

<210> 4928  
 <211> 488  
 <212> DNA  
 <213> Glycine max

<400> 4928  
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 atgattaata gcatgttttc gttatatttc ttttaataaa aagagatttt aagtgaatta 120  
 gtaattagtg aggatagaag taaaaagaaa aaaagaaaaa ggaaaaaagc cagtaatatg 180

taagttataa gctagttgaa gtaataagcc aaaaattaca taaataaaat agcataatgt 240  
 atatctaata aatttatttt gattaaaata actagtcaaa ctaacttata ctagagtgtt 300  
 gtgttaaaca caattggaaa aaattgttga cggttaattat tatttaaata cgtttatgat 360  
 ttatattatt atcaaaaatt ataactctaa tagaaggaaa aaaaaaacac cttaatggtt 420  
 ctaaagctat tgaaagcaaa gaaaatattg atgaaaaaaa aaagaagtga agttgaccgg 480  
 ttcaaaca 488

<210> 4929  
 <211> 386  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4929

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 aacagataca atcctagatg gaggaatcac cctaacctca gatgggtccag ccctcagcaa 120  
 caacaacagc agcctgctcc ttccttccaa aatgctgctg gcccaagcag accatacatt 180  
 cctccaccaa tccaacaaca gcaacaaccc cagaaacaac caacagttga ggcccctcca 240  
 caaccttccc tcgaagaact tgtgaggcaa atgactatgc ttaacattca gtttcnnnnn 300  
 gaaatcagag ccttcattca gagcttaacc aatcagatgg gacaattgga tacccaattg 360  
 aatcaacaac agtcccagaa ttctga 386

<210> 4930  
 <211> 510  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4930

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 ccaaccagc agccatgtct gattatactt tgagagatgg tttaatgttt ttcaagggca 120  
 gacttatatt gtctaagagc tccaacttga ttcctacttt gttgattgaa taggaggaca 180  
 ctccagattt accaagacta acaaacggat ggcagcaacc ttctattgga aaggatgaa 240  
 aaagacaata atggaatata tccttcgttg tgatgtgtgc cagtggcata agtatcaggc 300

catgtcacca accgatctgc tgcaatccat tcccatccta gaggtggttt ggacagatat 360  
 ctctatggat ttattacag gattgccct ttacagcca aaacagttgc agaaaagttc 420  
 atcagagatg tggccaaact gcacgtgtnt cccaaattct attattgatc gagaaccccc 480  
 tctttctgag taaattttgg ggaaactttt 510

<210> 4931  
 <211> 605  
 <212> DNA  
 <213> Glycine max

<400> 4931

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 ttgtaaaata gaaaacaaaa ggtgtgtgag gatatgagtt cctttacaca tctttactct 120  
 atgaatgtca catttcattt catgatattt taaaagtgtg gaaagataat gagtcacct 180  
 acctaagttc tctcctgaga aaaatttgtc caattgagta tccattaata atcatagcat 240  
 attggacaat ctgaagacat atattaatcc aactaagtca tttttcatga aagcccattt 300  
 ttttattact accaaatagc cccaattaac tctatcaaaa gctttgctaa tgtcaatttc 360  
 aaagtaactt gcccaatttt tcctttgtac ttacacctca tgtgatgaat aatttcataa 420  
 gctaaaagaa cattgtaaag aatggatcga tctctacaa aacattattg ctcttcataa 480  
 ttatgcaatt tggaaagaga agttaagac acttggctaa aactttggac acatgatttt 540  
 tgttaggaca ttgcacggag agattgacca aagtctttta tacaacagg gtttttaatt 600  
 ttgga 605

<210> 4932  
 <211> 512  
 <212> DNA  
 <213> Glycine max

<400> 4932

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 tatcatgaca tcagagttcc actcttgaag aaggaagttg aatatactga aaatttgatg 120  
 aaaggccata aggagcaatg ggtcaagtat ggatgtacta ttatgtccga tgcattggact 180  
 gatcggaac aaagatgcat cattaatttt ttgattaact ctcaagctgg tacgatgttt 240



ttgaagactg ttgatggctc tgattttgta aagacagggtg aaaagctttt tgagttgctt 300  
 gatgccattg tggaggaagt tggagaagag aatgttggtc aagttgtaac cgataatggg 360  
 agcaactatg ttttatcggg taagttgttg gacgagaaaa ggaaacatat ttattggact 420  
 ccttgagcag ctcatgtat tgatttgatg cttgaagata ttgggaagct tcccttgatg 480  
 aggaagacaa ttagaacgaa ttaatctagt tg 512

<210> 4933  
 <211> 574  
 <212> DNA  
 <213> Glycine max

<400> 4933

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 ttctttctca ccagctcatt gagagggtgat gcaattgtag agaaattagg aatgaacctt 120  
 ctatagaagc ttgctaacc c atggaagctc ttaatatctc ccacactttt cgggatgggc 180  
 cattcttgga tggccttgat tttctcaggg tccacttgaa cccatttctt accaactaca 240  
 aaccctaaga aaactatatt atctacacaa aaagtacact tctctatatt tgaatagagg 300  
 gtatttttcc taaggactga aagaacttgc ctgagatgct ctaagtgatc atctaggctc 360  
 ctactataca ctaaaatatc atcaaaataa acaactacaa atctacctat gaaatccctt 420  
 aagacatgat gcataagcct tgtcgcaacc taaccttcgg cgggagggca acgcgtgact 480  
 cgcggtatgcg tgttccaaga aaggaatacg tgcggagtcg ccaccaacgt ttattcgagg 540  
 agaacgttcg gaaaaccgga aaagacgtga tcta 574

<210> 4934  
 <211> 644  
 <212> DNA  
 <213> Glycine max

<400> 4934

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 acgagtataa aaatatatct acccaaata agctcatttt atattaataa tattattttt 120  
 ttaacaaaa attaaaatta ttatcattaa ttattaaatc ttaattttga atttcaagta 180  
 aggattaggt ttgctttatt aattaaaata ttattttttg agattataat agttcaacat 240

tatgattaat taattaaatc tttttgtatc ccgtagtttg atgtattttc tttatacatt 300  
 tgacatttta aataagtcac tcaccccttat ttgaaataca cactaatagc attaatattca 360  
 ataactgaaa ttaatctaac agcccaaccg atgaattaat atggaaacaa tatttttaaaa 420  
 ttttacttta aactaattta ttcactaaaa tatatgtata atttattctt acttactgcc 480  
 caattcaaat tgaacaactt acacaaatgt taagaaaaat gttaaatacca aaagtcattg 540  
 acttccaatc aactattggt ttttaacaata gaataaaatg actctaaata tttttgaaaa 600  
 cctcgaaaa tatcaaattt tatctatgaa cccctataaa aaaa 644

<210> 4935  
 <211> 493  
 <212> DNA  
 <213> Glycine max

<400> 4935  
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 ccactccaaa aacctattga ggcaccatgc attatcattg cctcctcaat gaccctagca 120  
 aagatatgtg caagaggaag gtatgatagg tatacatctt tttcattcaa ctgcaagcag 180  
 gaaaaaggag ggtaagtcaa agagaggata gcaaaatatt cattatccta aaactgaaaa 240  
 cttttctaga gactagagct ctcaaaatac caacactagc ttactttttc attacaactc 300  
 ttcagcaatt gctgaatccc agctaagagt gtaataatgc tttcgttggt tatcaaacact 360  
 cccttgggat cacctgtagt tccactcgta tacattattg tacacacatc actttttctt 420  
 ttaacaggaa gatcaaaact ctgattatga ccctgctcta gacataaaaa actggaatga 480  
 gtattgagaa atg 493

<210> 4936  
 <211> 337  
 <212> DNA  
 <213> Glycine max

<400> 4936  
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 tggcccgctt ttttctgctt tgttgcttcc ttttgaattt agcagcacag aggcattcaca 120  
 ccccttcaag agtataggaa aaaagaaaac aatatgattt gatttcatga tgcattcaat 180

gaggcggaag cagtcaagag gaaaggaggg aggaggggtc aaaatagcat tacccgaacg 240  
 aaacaatcat ggaagtgcac tcgcagaatt gctgctggaa cagttttgtc cctagcagtg 300  
 gcacccctta ctgccttggc aacaatgaac tccacat 337

<210> 4937  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<400> 4937

agcttgtaaa catgattagg atgttaaaag tctacaaaac ttgaagactg gtctacatgt 60  
 atctcttctt caatgtatcc attgagaaaa gcactcttca gatccatttg gtataacttg 120  
 atatccataa tccatgcaaa tgcaagtagc aatctaattg cttccaacct tgcaataggg 180  
 acatagggtt catcatagtc aatgccttcc tcttggttgt atccttttgc aaacaatcta 240  
 gtcttggtcc ttaatatgat gcgtgattcg tcagggttat ttcgaaacac tcatttggtt 300  
 ttgattgact tatgagaggc aggttttagt ccacacttca tccgtttaaa ctgattagtt 360  
 cttcatgcat agccagcaac caatgctcat cgtacaaagc ttcatttatg tt 412

<210> 4938  
 <211> 597  
 <212> DNA  
 <213> Glycine max

<400> 4938

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 aagtctagat aggtgggttag ccactaaatt ttcacttccc ttcttatcct ttatttcttg 120  
 atcaaattcc tacaacataa gtatccacct aataagtatt tgtttggaat taggcttagt 180  
 taagaggtac ttaatgttag acaagtggcc tcagatatct taagaagggg gggttgaatt 240  
 aagatatccc aaacttttct cctaattaaa aatctatctt actttttact taagttatga 300  
 attcccttaa tgacaatctt cttaaataatt aattcaaagc aagcaacttg aattatgaat 360  
 ataaagcaat aataaataaa ggagattaag ggaagagaaa atgcaaactc agttttatac 420  
 tggttcggcc acacccttgt gcctacgtcc agtccccaag caaccgctt gagagttcca 480  
 ctaacttgta aattcctttt acaagttcta aacacacaaa gacaaccctt tccttttgtg 540

tttagagatt ctttacaaca agagactcac agtctcttaa tcccttagag aatgaga 597

<210> 4939  
<211> 533  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4939

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ggacactctt gattgtaaat ttactttttt tggtatcaat tcacatacaa cttccattcc 120  
ttgtaaaaat gctcatattt ggcattctag atttgggcat atctcagaca aagttttcaa 180  
acatttgaat aataaaattg gtctacacct ttctcccaat ttctcttctt ctaattgttt 240  
tgtttgccct cttgctaaat ttagaagatt atattttcct aactctaacc atttattaga 300  
attatcattt gacttaattc gctgtgatat ataggggtccc tatgtccacc ctacctatga 360  
gggaaagaga attttcctta cattgggtga tgactactca agattcactt gactatttct 420  
gcttaagcac aaatctgaag ctttaatcta tgtgcaacaa tttttcacca tgggttcagac 480  
tcagtttggg gtatctatca natgccttcg gtctgataat gctaaggaac ttg 533

<210> 4940  
<211> 552  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4940

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tttatccaaa cgcacccttt gcataaaaac ttttactact ctctagctga tataagtgaa 120  
tgtttattgc aggctgtggg aaaaagggtg atgactgatg ttccctttgg tgttttgctc 180  
tctggaggtt tggactcttc attggttgca gccgtcacgg ctcgctacct ggcaggcaca 240  
aatgctgcca agcaatgggg aaccaaatta cactctttct gtgtaggcct tgaggatatgt 300  
aagcgtacat attcttgaat tagcagtgga tgtttttaata ataagaagga agccatgaaa 360  
tttgtcttaa tctttaatca tcttatgttg agtaggtgac acctgacctt aaggcagcaa 420  
aggaagtagc agactacata ggtactgtac atcatgaant tcactacact gttcaggtat 480

atctaaatga gatagtgttg ttactgctaa gaaattcggg gggtttgatg cctaaaatta 540  
taatttgtaa at 552

<210> 4941  
<211> 559  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4941

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tattaacagg aataaactaa acgtaatggt tgaaattgaa aaaatataaa gtttgatgaa 120  
gagatattat gttcaattga tgtgatgtgt caaaaattaa tattaaaaaa actataaatt 180  
taatttaaga ttaacttata ttataataat ttacttttca cttcatctag aaaaagaaat 240  
actttcaata tattaagatt cacattttaa aatttaaaga aaaattaaaa tgattgatta 300  
agaaataata attataaata aaaaataaaa atgaaatacc caatgcaata aaagtcacaa 360  
acttaatatg gaagaaaaag attgggctaa ttattggaca gaggaatcaa agtacgcac 420  
agactcaact cccagagtgt tatgaagagt ttttctttta tcgataaata ttacgatatt 480  
agtttaattt ggttggtttt attaataaag aatcttnggt ccatcactta attttttata 540  
attctaaatt ttttatatg 559

<210> 4942  
<211> 556  
<212> DNA  
<213> Glycine max  
  
<400> 4942

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ctaagatttt gcatacacct ccttcaaagt gaagtgtgta gcctctctcc atcatttggc 120  
caatgcttag aagattttct tttaggctgg gaactagtaa gacatcatgg atgagtcgcg 180  
tacctttatt tgtctccacc atgacagtgc ctttgccttt tgattcaacc acacttctat 240  
ttcccagtcg acctttgact ttgacagact catcaatata tttgaaaata gtctcatcct 300  
tggccatgtg attgctacat ccactatcca agtaccagct tcttcccttt tcttttattg 360

agtccttgagt ggcgtagaat gtacattgtt cttgatcatg ctcctttgtg atatgcttga 420  
 tgcctatctt tgttgcgaca atctctctct acgtgccga acttctttgc atggttgcat 480  
 tgtggcatat tacagaacca acaatctctt tctacgtggc ctttgccttt tgcataatatt 540  
 gcatggagga ttttta 556

<210> 4943  
 <211> 446  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4943

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 tcttaagaag ggggggttgaa ttaagatata acagactatt cccaattaa aaaaattcta 120  
 cttttaattt aaccaacaa ccaagattt cttttaaaca agaactccta gataattatg 180  
 caaattaatc ttactaaata gaaataataa ccaataaagg agtttaaggg aagagaaaat 240  
 gcaaactcag atttatactg gtctggccac acccttgtgc ctacgtccac tccccaagca 300  
 acccgcttga gagttccact atcgtgtaaa atccctttac aagttttgaa ccacaagaagg 360  
 acaacccttc ctttgtttca gatttcttta caacaagaga ccttcggtct cttaatccct 420  
 tttgagaaat agaaagaaga gaagac 446

<210> 4944  
 <211> 393  
 <212> DNA  
 <213> Glycine max  
 <400> 4944

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 cgcaagggtc tgcggtttgt gctcctctgc tgaccaccat acagaccttt gcccttccat 120  
 gcagcaacct ggagcaattg agcagcccga agcttatgtt gcaaatattt tcaatagacc 180  
 tcctcaacct cagcagcaaa atcaaccaca gcagaacaat tatgacctct ccagcaacag 240  
 atacaacct ggatggagga atcaccctaa tctcagatgg tctagccctc agcaacaaca 300  
 acaacagcct gctccttcat tccaaaatgt tgctggccca agcagaccat acattcctcc 360  
 accaatccaa caacagcaac agccccagaa ata 393

<210> 4945  
 <211> 400  
 <212> DNA  
 <213> Glycine max

<400> 4945

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 ctaagctcac ctcccttgaga tgagaagcta gagcttagct acacaccccc tataatagct 120  
 aagctcacc ccatgacaaa aaacatgaaa atacaaaaaa aagtccttac tacaaaaact 180  
 actcaaaatg ccccgaaata caaagctaaa accctatact attagaatgg ccaaaatata 240  
 aggcccagac gaaggaaata cctattctaa tatttataaa gataagcggg ctcatactta 300  
 gctcatgggc tcgaaatcta cctaaggct catgagaacc ctagggcctt cccttgatc 360  
 tctagcccaa tctacttgga gtcttctacc caatgccctt 400

<210> 4946  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4946

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 actctgtcat catgccgaga ctcaagaagg ccaacagggt tagccttctc taagtattat 180  
 gaacaaaatt caatggcttc ttctgcaatg taccttctca caatagatgc ttctagatga 240  
 tatagattct ttgtatacct ttttaagatc ttcatgtatc gctcaaccgg gtacatccac 300  
 cgtagataaa caggaccacg acatttgatt tctctgacca gatgcacaat caagtgaatc 360  
 atgatgtcaa agaaagcagg aggaaaatac atctncaact ggcacagtat aattgcggcc 420  
 tcattttcca actcataana catgactgga tc 452

<210> 4947  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 4947

ntgcctgact ccttcatttc ctatgacca ttcttctatc tatgtccctt tctttntaca 60  
tttaattgtt catctttcta tagctcttta tttattttct tgctttattg aaatcatttt 120  
caaaaatact tagtcgaata tatctcataa aaaattacat attttatatt caaatctgta 180  
ttttcatgaa aaggtgccaa gaattgttat atttcttcaa atctagctgt tattggaaat 240  
caacttttag tacattgtct tttcaataaa gattactaca aaatttgaat aacttgattt 300  
tttgctgatt tgaataaaaa taatttgctg atttgaataa aaataattca catctttgaa 360  
tcttgcgatt ctaaacttta agaactcaag aatac 395

<210> 4948  
<211> 352  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4948

nttcgttcac tttgcatgag ntttgccacc atatgttccc atttccatgg atggtaccac 60  
cacctttaac tgatagtttc tcaacactgt cgaaagtaag ccagtgagtg agatcttcgc 120  
tgtaatctga taggttttct gatgcttcaa tggttccaga aatctgaaaa acaaaacaat 180  
gaaaaatcat cccaaattca tatatacaga tatcgaacaa ttgaagatct cttcaatgtt 240  
tataattcaa tttttaaaaa tatttgaact agcaaattta atttgttcca aactataacc 300  
tgcacttcca tgttggatct gcaagggcca gacaatctga atggcttgag ta 352

<210> 4949  
<211> 444  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4949

agctggtcac gaagntgctg catttctccc tataagaatg caacntttta ataagcggaa 60  
agcgaagcca aatgtgggaa attaataataa aagaagaaat ataagcaaaa agagtcattg 120  
aagtcaagaa ctcaaccact aaattcagat gaattggcag agtaaagcaa aaaaatatta 180  
cctgcaagaa tcgacgttct tcaagccact gtttgacagg catcacttta tcattagcat 240



ctttccattc atttgcaacc acaacagcta ctctggttgc tgttaccttg gcacgagcca 300  
 actccctgtc tagagtctnt ctttctctct aaagaatgtc aaataaaccg cgcaaaaata 360  
 aatatgatct taactagagg cagtacaatc aagaataaag caaatgtgag tttgaacatg 420  
 ctgaagactt ttcacacaat acat 444

<210> 4950  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4950

tgtgcctcct cacgtctgga atatgaatgt agcttatatt attcaaagac ccttaggtgc 60  
 tttgttgatg gcttcttctc gttccaagct tcaattggag tcttgtcttt tacagactta 120  
 gttggacatc tgttgagtat gtaaacaaca ttgtagactg cttcagccca aaatgtgtta 180  
 ggtagtccct tctccttgag cattcatcta gccatttcca taactgtgcg attctttctc 240  
 tcggacactt cattttgttg aggagaatat gcgactgtaa gttgtcgctc aatgccttca 300  
 tcctcacaaa atctttcaaa ctacgagag atgtactctt tgtcgngatc acttcttagt 360  
 acttttattc gttttccact ttgatttcaa caagggcctt gaactttttg aatactccag 420  
 agacttctga ttnttctttt aanaaatata cc 452

<210> 4951  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<400> 4951

agctctcata aattcacgaa actattccaa atgctctgct tctccatggc taccgcacca 60  
 aaagaaacct cagctcctgg atcaccctct gtaccatcat ccaccatagc accatcaaac 120  
 caggaacaac ctgaattcca tatccaaccc atacaaatga ttcttggtca agctcctgtc 180  
 cttgagaaac tggttcccaa acgacaacag ggagtgaaga cttctgaaaa ccctagcctt 240  
 gcaacaagtc ctatggaagt agacacggag atggacaaga aaatccgcag tattgtgagt 300  
 aacattctga aaaaagcttc tgtccctgat gctgatgaag atgttccaac atctttcacc 360

ccgaatgttt ctgtgcctga tgctgagaaa gaatgttcaa catcttccac tccaaat 417

<210> 4952  
<211> 363  
<212> DNA  
<213> Glycine max

<400> 4952

agcttgtagg gttaatgtct cacgattatc acatgcttat gcaacaattg ttagtcgtgg 60  
ctatacgaga catcttgcca tacaaagtca ggtaacgat aactcgctg tgatttttct 120  
tccatgctat atgtagcaaa gtcattgatc cagtcatgtt tgatgagttg gaaaataagg 180  
ccacaattat actgtgccaa ttggagatgt attttcccc tgctttcttt gacatcatga 240  
ttcacttgat tgtgcatctg gtcagagaaa tcaaatgttg cggtcctgtt tatctacggc 300  
gaatgtaccc gattgagcga tacatgaaga tcttaagagg gtatacacag aatctatatc 360  
atc 363

<210> 4953  
<211> 369  
<212> DNA  
<213> Glycine max

<400> 4953

agcttcttgg ggttgtttgg ctattataga tagttcattg aaggattttc taaattggca 60  
ttgcccctaa ctaagttgac tcgtaagaat gagaagttat tctggaatga gaagagtgat 120  
caaagtttcc aagagttgaa gaggcggttg acgacagctc cagtgttaat tttgcccgc 180  
cctaagagaa catatgaagt gtattgcgat gcaagcgggc aaggcttggg gtgtgtgttg 240  
atgcatgagg gaagagtact ggcttatgct tcgcgtcaat tacgtgctca tgaatttaac 300  
tatccgactc atgactagga actagcggcg gtggtcttag ccttaaagat ttggaggcat 360  
tatttgtag 369

<210> 4954  
<211> 440  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4954

agcttggttaa tccatggaag ctctaataat ctcccacact ttntgggggtg ggtcattctt 60  
 ggatggcctt gatttttctca ggttccactt ggaacccatt tctaccaact acaaaaccta 120  
 agaaaactat attatctaca caaaagggtac acttctctat atttgcatag aggggtgtttt 180  
 tcctaaggat tgaaagaact tgcctgagat gtcctaagtg atcatctagg ctctactgt 240  
 aactaaaaat atcatcaaaa taaacaacta caaatctacc tatgaaatcc cttaagacat 300  
 aatgcataag cctcataaag gtgcttggtg cattagttag cccaaaaggc atcactagcc 360  
 attcatacaa accaaacttg gtcttgaaag ccgttttcca ctcatcacc tttttcatcc 420  
 tgaattggtg ataaccactt 440

<210> 4955  
 <211> 431  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4955

agcttgtang gttaaagtct cactgattatc ttatgcttat gcaacaattg ttagtcgttg 60  
 ctatacgaga catcttgcca aacaaagtca ggtaacgat aactcgcctg tgatttttct 120  
 tccatgctat atgtagcaaa gtcattgatc cagtcatggt tgatgagttg gaaaataagg 180  
 ccacaattat actgtgccaa ttggagatgt attttcccc tgctttcttt gacatcatga 240  
 ttcacttgat tgtgcatctg gtcagagaaa tcaaagtgtg tggctcctgtt tatctacggt 300  
 gaatgtaccg gattgagcga tacatgaaga tcttaaaagg gtatacaaag aatctatatc 360  
 attcagaagc atctattggt aagagggtaca ttgcaaaaga agccattgaa ttntgttcag 420  
 aataacttaga g 431

<210> 4956  
 <211> 365  
 <212> DNA  
 <213> Glycine max  
 <400> 4956

tagtaaactc ccgtatggcc tcaaacaatc tcctttgtgt ttgacaggc taacaaaagt 60  
 tgtcaagcaa gatgatgttg cttaatgcc aacaagccat actatgtttg ttaagcattt 120

cttggatgga aagatagctt ttttattgtc tatgtagatg atattgtaat tacaagagac 180  
gattatgac aaataaatca tctgaagaat cttctagcca aggaatttga agtcaaggat 240  
ctaggccaac acaagtattt tctaaggatg gaaattgctc ggacaaagaa tggatatttt 300  
gttcattaaa ggaagtacac tttggattta cttcaagaaa tatggatgct tggatgaaaa 360  
gcagc 365

<210> 4957  
<211> 449  
<212> DNA  
<213> Glycine max

<400> 4957

gcttaggtct gcttaatata acacttttta gtttattatt ttcttagttg cttcctgcta 60  
ttagtcaaaa ccattttgct atgtttcatg tttttctggt tgtgttggtg ttttgagttt 120  
gaaagttgaa cgattgtgcc tagctttttg aacttttaggg gacattgttg ttgttgaatg 180  
gcactatata acatgaatgc attttggttt gcaacctgct gagtttgcaa ggggttgatga 240  
agcaaattta ataataaata aaaataaatg ttttctctct ggctctcttt gtatatttat 300  
tgaaaaagta tacaatattt atagagtata aataactaaa aaaattaagt attataataa 360  
aaaaaatatt tacattaagt gacttaataa tattttttta tccaaagttt tacgatactt 420  
aggtagacgt aggcacttac ctttgatat 449

<210> 4958  
<211> 443  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4958

agctttcatn nttaattat ttttattata tttgatattg atacaaaata tttgtctaaa 60  
tagttatttt tgtctttgat tgtgtaattc gttgacaaat gtgggatgaa aatacaaaat 120  
ttaggattca agagtgtaaa aagtgcgata aaaatatatc tggccgttaa aaaaatagtc 180  
tacttaactt ttgtttgtca tagttaataa aataatctac gtggtataga gagatgaatt 240  
tctcaatgaa atgattacca acgtgggttat atttatattt aattgtcagt ataggagcat 300  
atttgtcata taatattttt tttatttttt gtcttctacc ttattggtaa attgtgatta 360

attatcataa tttgaaaaaa aattataatg attgtggcaa aatttttttag canactctaa 420  
aataaattaa gtttaaaaga aaa 443

<210> 4959  
<211> 443  
<212> DNA  
<213> Glycine max  
  
<400> 4959

tccattgttc aatttcgagc gtctcgatat aatatgcgcc ttaatcttac ctccgagtga 60  
aaagttatga ccattagaat tgctcaagag ctccattgt tcaatttcga gcgtctcgat 120  
atatatatac gcctgaatcg gatctctgag tgaaaagtta tgaccttttg aattgctcaa 180  
gagcttccat tgttcatttt caggcgtctc gatataattat gcgccagaat cggacatccg 240  
atttaaaagt tatgaccatt tgaatttctt gagagcttcc gttgttcaat tttgagcgtc 300  
tcgatataatt atgcgcctga atcggacctc cgagtgaaaa ggtatgacca tttgaattac 360  
taaggagctt tcattgttca ctttcgagcg tctcgatata ttatgcgctt gaatcggacg 420  
tccgagtga aagttatgac cct 443

<210> 4960  
<211> 398  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4960

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agagagcaag atatgaagag ccaatgggtg atacatggac ggagatgaaa aagatcatga 120  
ggaagcggta tgtgccggt agttactcaa gggacttgaa attcaagctc caaaaactaa 180  
cccaaggcaa caagggggtt gaggagtatt tcaaggaaat ggatgtgctc atgattcaag 240  
caaattattga agaagatgag gaggtaacta tggctcgatt tcttaatggt ttgactaatg 300  
atatccgtga tattgttgag ctgcaggagt ttgttgaaat ggatgatttg cttcaciaag 360  
caatccaagt gtgagcaaca ataaaaagga agggagtg 398

<210> 4961

<211> 435  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4961

agcttagtaa agctaagcac tatcaatctc ctcttcttgt gcaaatttgt ctaaaacata 60  
 cttagacact tcttgagcag gtacgagcag ttatgcaagt gggatcagca actttcatta 120  
 tcagagtaat caagcacagc ggaatctgta gtttagacaa gttgcaagtc gtttccagga 180  
 tgtcaagaca tctcacatga catctgcttt ctgcttctgc tccccctgtt tccatgctta 240  
 ctgcagcatc ttctaacagc tactagtctt ctccaggatg tcaagacatc tcctgtgaca 300  
 tcagctatct gctccccctg tctccatgct cttactgcag catcttctag tagcttccat 360  
 cagtcacat cagcagcagc agtctcccc tcagaatcgt atacatacaa ctcncctca 420  
 aaatcatgaa tcatg 435

<210> 4962  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4962

ntgaacatga gacatccaag ccctctagct cataacatct tttcaaattc aaatcttcaa 60  
 gagccctaca tccaacatga aggtatttta accccaaaca cgaatcgagg tttagggtct 120  
 tgagaagagg gaaagatgat tccgagaaca aatcaggaag agaagggttg ttgttcaaaa 180  
 tgactagga aagagatagg gtttgtaggg attgaaagcc atgtctcata accgatgaag 240  
 gaggcaaacg aaaccctgat tttagtttca aaaccctaag agtttcactt ccaataacac 300  
 acctaggaaa gttgaagtaa tcactgttac acactgtgga agctccaata tcaagctctc 360  
 taacgttggt cctaattggcc ctacggatca aactattcag ccgcgaaaaa ctcaaac 417

<210> 4963  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4963

agctntataa tatagtgcaa aagttttttt ctgccatttg taatttttat ttacaataat 60  
 ttttttcatg caggattatc aaactataac atcaccaccc gtctatatta gtccacttga 120  
 cttaggtccc aagtatgctg acaaattggg agcaggattt caggagtatc gaaagatata 180  
 cggtgaaaat tattgttttag ggcaactgat tttttggcat aatcagagta acgcggagcc 240  
 agattgcacc ctggctagaa taagcagggg ttgcttgtca ttaccagaca tcagttcctt 300  
 ttatgccaaa gtcagaagc cttcacgaca tcgtgtttat ggtccaagga ctgtcagatc 360  
 tatgctggca aggatggata gttattctgt atttatgaag ctctcattcc taactttcct 420  
 ttttgtggtg gggggg 436

<210> 4964  
 <211> 297  
 <212> DNA  
 <213> Glycine max

<400> 4964

atggacatga tggggcctga gctagatgaa cgccttgaa gaacagaagt gtgcactctg 60  
 ttgtatgagc atgatatctt cagaattacc tgagtcgact tgtgtctaga gatatcagac 120  
 acctttgaga gtttcaagga gttgagtcta agactatgta tatacctaga gtgggggaatg 180  
 aagagaatca tgagtgacca tggcactgta tgctgcacat ctgaaggcat cactcatgag 240  
 ttctgtgcag ccattacacc acatcggaat ggcatagatg agaggataga caggact 297

<210> 4965  
 <211> 330  
 <212> DNA  
 <213> Glycine max

<400> 4965

agcttctcga tatattatgc actctgaatc ttatttccat ttgaaaagtt atgaccaatt 60  
 gaatttctgg agagcttccg ttgtgcaatt tcgagcgtct cgatatatta tgcacctgaa 120  
 tcagacttcc gtttgaaaag ttatgaccat ttgaatttat ggagagcttt cgttgtgcaa 180  
 ttccgagcgt cttgatatat tatgcgcctg aattggactt ccgtgtgata tgttatgacc 240  
 atttgaattt ctcgacagct tccattgcta atttcgagcg tctcgatata ttatgcgcct 300  
 gaatcggact ttcgtgtcat aagtatatgac 330

<210> 4966  
 <211> 446  
 <212> DNA  
 <213> Glycine max

<400> 4966

tcaagaaaa gatggcctca gcaaattcct tatttttcag aaggaattct atcaatagac 60  
 ctccaatctt taatggagag ggttaccact actggaaaac ccgaatgcaa atttttatcg 120  
 aggcaataga tctaaatatac tgggaagcca ttgaaatagg gccttatata cccaccacag 180  
 tagaaagagt ttcaatagat ggtagtcat caagtgaag cataaccata gaaaaaccta 240  
 tagatagatg gtctgaagag gatagaaaac gagtacaata caacctaaaa gccaaaaaca 300  
 taataacatc tgccctaaga atggatgaat atttcagagt ttcaaattgc aagagtgcata 360  
 atgaaatgtg ggacactctt cgattaacac atgaaggaac tacagatgtt aaaagatcta 420  
 tgataaatgc actaactcat gagtat 446

<210> 4967  
 <211> 418  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4967

tatcattnga ctcaacttgc ataccactt ctaaaacaat ctagatacgg gagcatagta 60  
 ttaaatecat ccaatgcagc tataaacggg tttccattt tatctgctta ttcagcctct 120  
 aaaggatgc atttctagct agtttttttt tcatatccca gtatcccaac attgtaagta 180  
 aatataacct ttgaatttga atgacactac taaaaaaccc tttttttacg tttctaggga 240  
 actgtcttan aatgtgactc agtggcattt gtgtaattaa tgcaaatata actacgatga 300  
 tctctcacac ccgtctttgt aggtaggacg caatgaaact ttttaaattg aagacttcat 360  
 taaagatggg atatagaagc aaatcgatc tgtaattaag aaaataatta aaaataag 418

<210> 4968  
 <211> 404  
 <212> DNA  
 <213> Glycine max



<400> 4968

agcttccatc aagggagtga tgtctaagat gtgacctatg ccttccttcg taatagtcac 60  
gaagttcttc acttaggttc ttgcaagagt tatgactact attggaggca tgtttttctc 120  
ttttcatttc tttcattatt tttcttcttt cttcctctct tattttcttt ctttcatctt 180  
gacttatttc ttctactttt gtttttcatt tttcttttct ctcttgtttt tcttttcata 240  
acctgagggga actcaactca tctaagattc tagataaagg gtctttatga ctagtaccct 300  
cgccattaac actagatgaa tgatgactca tggtggctcc taagttgttg ttctttcttg 360  
ttggagggtt gaaaacataa ggaaaaagaa actatggttg aaac 404

<210> 4969

<211> 343

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4969

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gaagctctcg agaaattcaa atggtcataa cttttaactc ggaggtccga ttcaggcgca 120  
taatatatcg agacgctcga aattgaacaa cggaagctct cgagaaattc aaatggtcac 180  
aacttttcac acggaggtct gattcaggcg cataatatat cgagaccctc aaaattgaac 240  
aacggaagct ctcgagaaat accaatggtc ataacttttc actgggatgt ccgattcatg 300  
cgcataatac attgagacgc tccanatgaa caacggaagc tct 343

<210> 4970

<211> 448

<212> DNA

<213> Glycine max

<400> 4970

cttttattgt aatcttgaaa ttcaggacag cactctaatt tctgaaattt ttgggataaa 60  
aatggtcatt gaccagtccc ttttccatga ctttaacaaa ttaccagtg acggtgtacc 120  
atttgaaggt tcaactgaatg acgactggaa atttgatttc tctgcccatg atgcccgcca 180  
gttggtttgc accaacaatg cggatatgac cggacgtctt cttgccgggt cattggcttt 240  
tgaaagccgc atccttcact atttaattgt gcgtattttg cttccacggt cttccaacct 300

tgccctgggt tctgaggaag atctaattat catgtgggcc ttccatacag ggcgtcaact 360  
 tgactgggca cacttagtca aatatcgcat gcataaggca ttgcgattaa atgctccact 420  
 accatatcca cagcttgtca ctctcttt 448

<210> 4971  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4971

agcttgttgt caacaaacaa atcanaatca attttctgat catcaaaacc tagctccaac 60  
 ttctctctcc ccatatcaac tatgcagctt gcagtcaaca tgaatggcct tcccaatatt 120  
 acagggatgt cagtatcttc agagatatcc attaccacaa agtctgtcag gaagataaaa 180  
 tgtttttctc tgaccaacac atcttcaatt actccatag gcctggtaat ggaacagtca 240  
 gctaattgta aagtcattcg agtgggcatt atttccaact cccccaatct tctgcacatg 300  
 gagagtggca tcaaattgac actggctccc aggtcaataa gagcttttcc cacattgact 360  
 tctccaattg aataaggaat agttacactc ccaggatctt tatgcttggg tggaaggatc 420  
 ttttgatca tagcact 437

<210> 4972  
 <211> 434  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4972

gggatttctt ttagtaggga atctatcctt cctaagatgg agccattctt aatcacctc 60  
 attaagaact agcttgtttc ttctctatt gcttttagtt gaatacacct ttgtttggtt 120  
 ctctatttgg ntcttaaccc tctcatgcaa cttctttaca aactctgacc tagattcccc 180  
 ttctttatgt ataaaagaag tgtctagcgg gaggggaata aggtctaaca gtgttaggcg 240  
 attgaacca tatacaacct caaaagggga ctgcttgggtg gttctatcaa cccccctatt 300  
 gtatgaaaat tctacatgag gaagatactc atcccatgac ttatggttgc ctttcagaag 360  
 agcccttaga aggggtggata aagacctatt cactacctat gtttgccat cagtttgtgg 420

atgacaagtg gtag

434

<210> 4973  
<211> 299  
<212> DNA  
<213> Glycine max

<400> 4973

tatctcagat ggagtgatct gattcgctct gagcagaaca tccaagatgg gaaagggtcaa 60  
gagactgaag cttctgcttt cagaaatgca gatatttgtg acaataaact tgtcgagggg 120  
aaaagttggt atggaataac ttttgggagc caaaaacatc ttccttctcg ggtgatgaaa 180  
aatgttggtc aagtggagca cgatccacac ggaaaggaaa agtattgagg ttttgaaaca 240  
cgcattccat tatattagat aaaagagtat gaagaacgtc atggaaatat gccatgtaa 299

<210> 4974  
<211> 409  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4974

tcattggagc ttgtaggcct aagatcttct tcatcaatgg attccttctt ttcttggaag 60  
ataaatggca gcggaatgga gaatgaagag agagaggaga cgccacttca aggagaagat 120  
gagtctagaa gaagctcacc accatacgag gccatggata agagcttgga ggaagaagga 180  
gatgaatgaa gggagaggga gagaagagca cgaaattttg tgctcaaaaag gagctctgaa 240  
atctgaagtt aatattcaaa tgatcaaagt tgaaaaaaat gcacacacat gacctctatt 300  
tatagcctaa ctgtcacaca aaattggagg gaaattcaca tttcacttga atttgatatt 360  
gaatttgtgg agccagactt tggagccaaa atttcacgta atatgacta 409

<210> 4975  
<211> 450  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4975

gacactatga tactcagctt aancattcaa tttgagcgtc tcgtaatat acgggactct 60

ttcatacatc cgagtaaaaa tttattgtcg tttggattgg ctgagagatt caacattcaa 120  
 tttcgagcgt ctccatatat tacgggactc attcagacat ccgagtaaaa agttattgta 180  
 gtttgaatta gcttagagct tcaacaatca atttcgagcg tctcgttata tcacgagact 240  
 caatcagaca tccgagtaaa aagttattgt tgtttgaatt agctcagagc ttcaacattc 300  
 aattttgagc gtctcgatgt atgacgagac tcaatcagac atccgagtaa aaagttattg 360  
 tcctttgaat tggctcacag cttcaacatt caattttgag cgtctcgata tatgacggga 420  
 ctcaatcaga catccgagta taaagttatt 450

<210> 4976  
 <211> 428  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4976

agctntgagc caattcaaac gacaataact ttttcatgga tgtctgattg agtcctgtca 60  
 tatatcgaga cgctcgaaat tgaatgttga atctctgagc caatccaaac gacaataact 120  
 ttttactcgg atgtctgatt gtgtctcgta atataacgag actctcaaaa ttgaatgttg 180  
 aagctctgag ctaattcaaa cgacaataac ttttaactcg gatgtctgat tgagtcctgt 240  
 catacatcga gacgctcgaa attgaatgtt gaagctctga gccaatcaaa acgacaataa 300  
 cttntactt ggatgtctga ttgactctcg tcacatatcg agacgctcga aattgaatgt 360  
 tgaagctctg agccaattca aacgacaata actttttact cggatgtctg attgagtcct 420  
 gtcataata 428

<210> 4977  
 <211> 447  
 <212> DNA  
 <213> Glycine max  
 <400> 4977

tatcaattct caagaagcat aagaaggcta taggctggac tctggcggac attcctggta 60  
 ttagcccatc cacatgtatg catcggataa atttagagga tggggctaaa ccagtaagac 120  
 agccatagag aagactcaac ccggtgattc ttgatgttgt gaagaaggag gtaaccaaac 180

ttttgcaagc tggaatcatc tatictatct ccgacaacca atgggtgagt cccgtccagg 240  
 tagtcccgaa gaaaaccggc ctcaccgtga taaaaaaatg agaaggagga gttgattcct 300  
 actcgggtgc agaacagttg gagagtctgc atcgactata ggaggctgaa ccaggttacc 360  
 aaaaaggacc attttccctt gccattcatt gaccagatgc ttgaacgcct ggcaggtaaa 420  
 tctcactact gttaccttga tgggtttt 447

<210> 4978  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4978

tgaagggtgtg tagcccacca tctggtaatg tgtctactat tattgtcatc attttttttt 60  
 cgtcattgag gtgccacttg agctgccagg tctctccacc tttgggcgta ttctttgaaa 120  
 gatctgtgcc cctttttgca catgttctgt tgttgcaccc tatccggaac catatcaaaa 180  
 ttgtactgat actgcctaata gaaggcaaac attaggtcct tccaagagtg gactcgagaa 240  
 ggttccaggt tgggtgtacca ggtaacagct accccagtaa gattttcttg gaaggaatgt 300  
 atcagcaatt cctcattttt tgcgtatgcc cccatcttcc gataatacat ctttagatgg 360  
 ttcttgngc aagtagtccc cttgtacttg tcaaagtcag ctccttgact tgggagggga 420  
 tgatattggg tctaggacaa 440

<210> 4979  
 <211> 449  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4979

ngaaatngaa caacggaagc tctcgagata ttcaaaggt tataacttgt gacactttag 60  
 tcctattcag ggcgataata taccgagacg ctcaaaattg aaaacggaag ctctcgagaa 120  
 attcaaattg tcataactta tcacacggaa ggccgactcc ggcggatagt atatcgagaa 180  
 ggtcgggaatt gaaaaccgaa agctctcgag aaattcaaatt ggtcataact taccaaacga 240  
 aagtcggatt caggcgcata atatatcgag aagcttgaaa ttgatcaacg gaagcactcg 300

agaaattcaa atggtcataa cttatcacac ggaagtccga ttcaggcgca taatatatcg 360  
agacgctcga aattgaacaa cgaatgctct cgagaaaata aagtggcat aatttgcac 420  
acggaaagtc gattcatgcg catactata 449

<210> 4980  
<211> 404  
<212> DNA  
<213> Glycine max

<400> 4980

tcacagtctg agtcatgaat aaggggtcat ttaatttttt tattggataa gttattaagg 60  
tttttttttt actcaaatgc ataggagtag taagttaatt aagttgataa tcacgaaaag 120  
agacataccg acagtggcag ctctataagt gttcgttcca tctatgaagt ttttgttacc 180  
agatattcgt gtctttttcc ccccttcacc aataaacacc acatgggtca tttattttgt 240  
aacttcaaca tactcttggg aaacgccttc cttgatgtag atcacaaatg gctttctgtg 300  
tttctacggc acttgcttca atgcctcatt gatgcttttg aaatctccac taccatctat 360  
ggctcagtaa cattacgctt gcgggtttaat ggacttgcat tttc 404

<210> 4981  
<211> 360  
<212> DNA  
<213> Glycine max

<400> 4981

agcttttaat ggaagtcagg agaatgaaag tgcgctgcaa ccattagctg gaaacgaagt 60  
tcatgattgg gtgatgacct aaaagaagac accatctgac acaaacatat ggaagaaaag 120  
ctcaatattc tttgatcttc catactgggc tgatctacat gtgcatctag atgttatgca 180  
tatcgagaaa aatgtgtgtg atagttaaat tggtagcctt cttacatta aaggcaagac 240  
aaatgatggt ttgaaatgtc atcaagacct ggttgacatg agaatacaag agcagttgca 300  
tccgatatca catgatcggt aaacgtatct tccccagca tgccacacaa tgtcagcaac 360

<210> 4982  
<211> 413  
<212> DNA  
<213> Glycine max

<400> 4982

tccgttggtc aatttctagc ctctcgacat cttatgcgct cgaatcggac atccctgtga 60  
aaagatatga ccatttgaat ttctcgagac tttccgatgt ttaatttcga gcgtatcgat 120  
atattataag ccagaatcgg acattcgtgt gaaaaggtag gaccatttga atttctcaaa 180  
agcttctatt ggtgaatttc cagcctctca acatcttatg cgcacgaatc agacatccgt 240  
gtgaaaaggt atgaccattt gtatttctcg agagtctccg atgtttaatt tccagcgtat 300  
cgaaatctta tgagcctgaa tcggacctcc gagtgaaaag gaatgaccat tcgaatttct 360  
caagagcttc cgttggtcaa ttgcaagcct ctcacatact atgcgccga atc 413

<210> 4983

<211> 412

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4983

agcttataat atatcgatag gctcgaaatt ttacatttaa actctcgga aattcaaag 60  
ggcataaatt ttcacacgga tgtccgattc gggcgcataa tatgtcaaga gtctcgaaat 120  
tgaacaacgg aagctcttga gaaattcaaa tgggtataaa atttcacacg gatgaccgat 180  
tcaggcaaat cacatatcga gacgatcaga attgaacaac ggaagctctt gagaaattca 240  
aatggtcata acatttatct cgaatgtcca atttaggcgc atcacatata gtgatattcg 300  
aaattgaaca acagaagctc tcgngaaatt caaatggta taacttttca cactgaggtc 360  
cgattcacgg ttataatata tcgatacgct cgaaattaaa catcggaac tc 412

<210> 4984

<211> 402

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4984

tccatcaaga gccatcaaca acatcacggt aaatatatac atcccattcc taggctagac 60  
gatatgttgg atgaattgca tggagcctgt gttttctcta aaattgattt gaaagggtggg 120  
taccatcaaa ttaggattag agagggggat gaatgaaaaa caactttcaa aactaagtat 180

gggctgtatg aatcgcttgt tatgcccttt gtgctaacca atgctcctaa cactttcata 240  
agattaatga accatgtgtt aaggggaattt ctaggaaaat ttgttgtggt tattttgatg 300  
atatcttgat ttacagcaaa ttccatgatg aacatcttgt gcacctgaga agagtttttag 360  
aggcctttan gcgtgagagc ttgtatgcta acatggataa at 402

<210> 4985  
<211> 402  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4985

tggatttcct cttagtaggg aatctatcct tcctaagatg gagccaaacc cagncccccc 60  
tattaagaac tagctccttt cttcctctat tgcccttagt tgcatacacc tttgtttggt 120  
tctttatttg gttcccaacc ctctcatgaa acttctttac aaactctgac ctagattctc 180  
cttctttatg tataaaaagaa gtgtcaagta ggagggtaat taggtctaata ggtgttagag 240  
gattgaaccc ataaacaacc tcaaaagggg attgcttggg ggttctatgg acccccctat 300  
tgtaggcaaa ttctacatga ggaagatact cattccatga cttatnggtg cttttcagaa 360  
gagcccttat aagggtgtat agagactatt cactaccttt at 402

<210> 4986  
<211> 349  
<212> DNA  
<213> Glycine max

<400> 4986

gtgcctgtat attgatgcac gctgaatcag agatccgagt gacgagtgat gaccattcga 60  
atgtgtcgag agctgtctat gtttaatgat cagcgtctcg atatattatt cgcctgaatc 120  
gaagctaagg gtgaaaagct atgaccattc gaatttctct agagcatccg gtgttcattt 180  
tctagcgact atatatgtga ggcacctgaa tcagacctgc gtgtgaaaag gtatgaccat 240  
tagaattact cgagagctga cgttgatgaa ttgacgcgt ctacacatgt tatgctccgt 300  
aatctgacat ccttgggaaa aggtatgagt attcgaattt atgcgagag 349

<210> 4987  
<211> 423



<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4987

agcttgaaat gttatgacca tttgtttntc tttagggctt tcgatgttta atttcgagcg 60  
 tatgaatata ttataagcct gaatcggacc tcagtgtgaa aagttatgac catttgaatt 120  
 tctcgagagc ttccgttggt caatttcgag cgtctctgta tgggatgctc ccgaatcgga 180  
 catccgagtg aaaagatttg accatttgaa tttctcgaga gctttcgttg ttcattttcg 240  
 agcgctcta tatgtgatgc gcctgaatcg gacctcagtg tgaaaagcta ttactgtttg 300  
 aatttctcga gggctctcga tgtttaattt cgagcgtatc aatatattat aagcctgaat 360  
 cggacctcaa cgtgaaaggt tatgaccatt tgaatttctc aagaacttcc ggtgttcaat 420  
 ttc 423

<210> 4988  
 <211> 354  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4988

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 aatggagatt tatacaccgg actcatgcta ctaataacat caatcatagg ttgataatat 120  
 gtcgagttaa ttgcattaaa tggcactata gcatttatca tccattttgc aatggctttg 180  
 tcacactttt ctacaatttt cttattttgc aagacactct tcaagctagg ttgagcttta 240  
 ggagttgttc taggcatgaa atagtcactc acatgaatag tgttctttcc tttntgagac 300  
 ttggaagaaa caggtgaatt tggagttctt cttaattcct caactattct caca 354

<210> 4989  
 <211> 323  
 <212> DNA  
 <213> Glycine max  
 <400> 4989

ctggatgcga tgggcaactt ggaaaccag ttggccttgt atcatatc tgaacctgtc 60  
 gcaagggttt gtggattgtg ctctctgct gaccaccata caaaccttg ccctgccatg 120

cgagaatcta taacaattcg accatccctg tagctgatgc accaaatata tacaatatac 180  
 ctctcaacc taagcagcaa aatcaaccac agcagagcaa ttatgacctt ttcagcaaca 240  
 gatacaaccc tgcattggagg aatcacccta accttaaattg gtccaggcct cagcaacaac 300  
 aacaacagcc tgctccttcc ttc 323

<210> 4990  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<400> 4990

gtataaataa caaataactc gtgattattc attattcctt tggagatata aatatgacca 60  
 agtttcagag gatagaatga caactggcgt ttacctaaag ttcaatatgt aacacactaa 120  
 acgactcagt tcaccagata tatacaagtt tatagcttta ggaactcaaa cctacacaac 180  
 actaaacacg atagctcatt caacttccaa catgctgtat atgattcaca agatggattc 240  
 cttatctcac tgataaacat cttacgggtc tcttcagag acattccttt cattgttatt 300  
 tataagattc aaatttaaaa tgatatgttt taataacact caatctataa tgttccttat 360  
 ataaattatg ttacaccag agatatttct ctctaaaaaa ataaatataa tgtattaata 420  
 aactattaga agagtagaaa gaagcactaa tg 452

<210> 4991  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<400> 4991

gtgcctgtat attgatgcgc ctgaatcgga catccgagtg aaaagttatg accatttgaa 60  
 tttctcgaga gctctctatg ttttaattttg agcgtctcga tatattatac gcctgaatcg 120  
 aacctcagtg tgaaaagtta tgaccatttg aatttcttta gagcatccgg tgttcatttt 180  
 cgagcgtctc tatatgtgat gcaccttaat cggacctccg tgtgaaaagt tatgaccatt 240  
 tgaatttctc gagagcttcc gttgttcaat ttggagcgtc tcgacatatt atgcgcccga 300  
 atcggacatc catgggaaaa gctatgacta tttgaatttc tggagagctt ccggtgttca 360  
 atttcgagcg tctgtacatg ttatgc 386

<210> 4992  
 <211> 432  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4992

agcttcttag ttncagatga tgcatatggg tttgtagcta cctcatgcac ttctctaag 60  
 actatggcat catttctggc gctaaactgc tgggagttgg aggccatctt ctcaattaaa 120  
 tttctggctt tagcaggagt catgtctcca agggctccac cactggcagc atctatcata 180  
 cttctctcca tattactgag tccttcataa aaatattgga gaagaagctg ttctgaaatc 240  
 tgatggtggg ggcaactggc acatagtttc ttaaactctt cccagtactc atacaggctc 300  
 tctccactga attgtctaata acctgagata tccttctga tggatgtggt cctggaagca 360  
 gggaaaaaat nttctaagaa tactctctta aggtcatccc agctcgtgat ggaccttgga 420  
 gcaaggaat ac 432

<210> 4993  
 <211> 302  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4993

agcttagaga aatcgattat gtcgacctg atatagtttt gttcctctac attcaatcct 60  
 acaagagttt cctcctacgc acgcacaaga actctgtcgt tgctcgctgat gtagggcctt 120  
 ccatcttcac cttcgacgac tacttgctgc tctctcgttg cttcagggtga attctttttt 180  
 cgagctggtg ttcattgcta ttttttttgt tcgttatgat tcttttttga tttctatatt 240  
 aaattgttgg cgagttcatt ttgagtgatt ttgntgactt gatacaaaag atattagtgc 300  
 ta 302

<210> 4994  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 4994

tccttaagaa gattccttaa gaagctagaa gctanctaca tatactcttt taatagctaa 60  
gctcacctcc ttgagatgag aagctagagc ttagctacac accccctata atagctaagc 120  
tcacacccat gacaaatata tggaaataac taataaaagg ccttattaca aagacaactc 180  
aaaatgcccc gaaataacaag gctaaaaccc tatactactt gaatggccaa aatacaaggc 240  
ctggacgaag gaataaccta ttctaattatt tacagagatt agcgggctca tacttagccc 300  
atgggctcaa aatctaccct aaggctcatg agaaccctag ggcgctttgt tggatctcta 360  
gcccaatct 369

<210> 4995

<211> 288

<212> DNA

<213> Glycine max

<400> 4995

gcattggatc aaagacctca acaagattat gctagagatg caggacaagg ccctaaggct 60  
ctcatgatcc gtaggttaca ttatgagtcc atggactaag tacgagtcca cttatccttg 120  
gacaactgag aataagattt cataactggt ggacctcgca ttacggctc catagtataa 180  
agagggcacc ctagtaatgc aggtatttta gcccttatat ttgagaacac agagactaat 240  
ttttgtatta cgggtagctt tgtaatttca catacattaa gtgcacta 288

<210> 4996

<211> 361

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4996

agcttaatta acttgtgttc tgaacatntg ttatcattta attttaaata caataccatg 60  
taaaatattc ctaattgtgc cattggggct cctccacata gacttcagtc caaattctct 120  
cactcgggtc tcatctgaaa atttgaagg gttaagataa tatcagttct gcacaaaaat 180  
gataaatcat gattatgcac tagttgccac ttgcagtgc ctatgtaata tgaacaaacc 240  
agtaactaa atctagcata acttctgact atggaacaaa gtagtctatt aattcatgag 300  
tcatgataca gaattaacac atttatagag aagaaagatt gagtgagaag atattcgtat 360

<210> 4997  
 <211> 420  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4997

ctaagcttgc catttggctc cacagatgga ctgtgtaaga ctcttcttgt ctctcattat 60  
 agctgatcaa gttgcccacg tgtatgttaa gttcttttga tgggtggacta agatcattnt 120  
 gcattttgtt ctttctactg ctttgaagac tccagttttg ttccaccact gatttatgct 180  
 gacatgggta gctctcgtga tattgctata ggaccagagg cagtgggttc tctcttggtg 240  
 gggacgttac ttattaatga gatcgatgcc tatacacatc cagcaaaata tcagcgactt 300  
 gctttttcag ccacttttat tgttgggatt acttaaaaaa cgcttgggtg tcttaggtat 360  
 gatactacta ctactatatc tatatgtata tatatcttta tatatgatat agatatttat 420

<210> 4998  
 <211> 420  
 <212> DNA  
 <213> Glycine max  
 <400> 4998

ctgcagctag gaagcatctg gagaggctta ttttatattg agatccaccc tggagcgact 60  
 aatatgtact aagaccttag gttgatgttt tgggtggccgg gtgtgaacaa agaagttatt 120  
 gagcttgtcc ttgcatgcct agtgtgtcag atagctatga tagatcacca gatgccttca 180  
 gggaagttgc aacctttata gatacccgag tggaagtggg atagtatcta cttggatttc 240  
 gtgggtggggt tacctaggac cctcaaaggt ttagattcca tttgggttat tgtatacatg 300  
 tcgaccaa atctgttcctt tatccctatt tacatcagat attctttata gaggttgatg 360  
 atcttggtcg tctgtgagat tgtagacca ctcagcggtc cttctaccat aatctttgat 420

<210> 4999  
 <211> 364  
 <212> DNA  
 <213> Glycine max

<400> 4999

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gtcatataaa tagtcgatgc atatctaaca tgagtaactt atgttttatt ccaaagctat 120  
cttcaaatca ctttgaaaaa tgtgtgtctt gcagtcaatc tacaaaaact aagaaatcac 180  
atcaatcagt agctaaagaa cttgagccat tggatttaac acattctaata atagagaat 240  
ttgatggaat gttgaccaa aatggaaaac gatattttat cactattatt gatgactgct 300  
ctgattatac atatgtatat cttatgaaat ataaaagtga agcgcttgac atgtttaagt 360  
tatt 364

<210> 5000

<211> 371

<212> DNA

<213> Glycine max

<400> 5000

agcttctcat tctctctcat aaggatttta ttgttttttc tttatataat acattaacat 60  
taaaattatc aattaaaaac aacattatat aatctgtttt agtagttgat ggattactct 120  
atggcttaat ataattcttt aacattgctt tttttttttt ttgtggtgtg tctgcacact 180  
atgcttgggt tgtctttgta ctcaagtggc ctgcaatagc cacactcttg cccaagagaa 240  
cggacaatga tatcaagaac taccggaaca cgcatattaa gaaaaggcta actaaaatgg 300  
gaatcgacct tgtgacacac atgcctaaaa acgatgcact tttctctagt gacggtcatt 360  
cctaaaccgc t 371

<210> 5001

<211> 310

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5001

aaccccatgg atcaatgcat ataccacaag gtcagtggga gtaaaaaaag ttttccttgt 60  
ttatatgtag atgatanntt acttgacgcc aatgatccgg gttcgctaca tgaggtgaaa 120  
caatttctct cttagaattt tgacatgaag gatatgggtg atgcatctta tgtcatcagc 180  
attaagattc atagaataga tctcgaggta tttgggtcta tcacaagaca ctatattatc 240

caaatttttag agagaattcg gatgaaagat tgttcaccaa gngttnctcc cattgtgaag 300  
ggtgataggt 310

<210> 5002  
<211> 407  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5002

ancttaagca gtgatcaaac tcgctctttg tttctggttt tgcgaacata tcagtaggat 60  
tatgcagagt gctaacttta tgaacttttg ttcttctttc tgaccgaatg aagtgatatc 120  
taacatctat atgcttggtc ctatcatgat gaacctgatc cttggccaag catatagcac 180  
taaggctatc acaatagatg tcagcatatt cttgattaat tccgagatca tatatcaaac 240  
ctcttagcca aattcctttc tttgcagctt cagaaagagc catatattca gcctcagtat 300  
ttaagagggc aacagaacgt tgaagtgttg ccttccaact caccaagcag ccaccaaggg 360  
tgtaagcata tcctgtnatg gaccttctct tgacaagata agctgca 407

<210> 5003  
<211> 414  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5003

agcttagcaa atggacctgn gagngttca ttttcatcat atcttccgta atactcatca 60  
cctctatcat atctaataat tatcacattt atgtctaatt gccatttat ttcatgttag 120  
taaatttcta aggcatccat tgcctaagaa atcttgggca gtaagtagac ataaccgaa 180  
catgaataat catcaataat ggtgataaag tatctttcct ttctgaaaga actaacatct 240  
aatggtccac aaatatcagt atgcacaact tcaagaagct gagtgcttct tgtagcttct 300  
ttctttgaat gtttagcttg gtttccctta atacatccca cacaaatatt tagattcata 360  
taatctagat aacgaagaga ttcattcttt attaatcttt ccatcctttc tcta 414

<210> 5004  
<211> 385

<212> DNA  
<213> Glycine max

<400> 5004

atatattaga gggactcatg gtcactatga atgacaaatt ccttaagata aaggtagagt 60  
tgccatgttt tcaaagcgcg tactaaggca tacaactcct tatcatacgt tgaatagtta 120  
tgggtaagac cacttaactt ttactacaa taggcaattg gatggcctta ttgcatcaac 180  
acagccccaa tcccaacatt tgaagcatga cactcaattt caaaagattt tttacagttt 240  
ggcaacgcat acatggggca ttagttagct attgctgaag aacattgaaa gcttcttctt 300  
gtttctctcc ccatttgaaa ccaacatttt tcttgagcac ttcattgaga ggcgctgcc 360  
atgtgctaaa atccttcaca aatcg 385

<210> 5005  
<211> 419  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5005

actaagctta catattatat atataatgat atgatggaaa aattatttat aatgaatact 60  
tagtacacaa tattttnttt cttaaaaaaa cataattaca atattatatg ttcaaattt 120  
ctatatttgt ctcttataat tatcccatac tccaatataa taatatttaa caagcttaca 180  
tggtaaaatt aactcattta aataagtga tcaaacttca gatacaatat atttttntaa 240  
tccatgcttg agacttaagt gctcgaatca actcaaactg tttacacaag ggttctctaa 300  
tacacacaca aatgcatata acttctaatt ataagaaaat ttcaagtaca gtataaaata 360  
tttatgaatt agtatattaa ntacttaata attcaaagat tggattgcta aatatcatg 419

<210> 5006  
<211> 430  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5006

agcaattcaa cgacnaagct tttacttgat gtttatgagg cccgcaaata tggagacgct 60  
cgaaattgaa tgggtgaagct ttgagcaaaa tcaaacgaca acaacttttt actcggatgt 120



ctgattgagt cccgtaatat atcgagacgc tcgaaattga atgctgaacc tctgagccaa 180  
 ttcaaacgac aatcactttt tactcggatg tctgattgag tcccgcataa tattgagacg 240  
 ctataaattg aatgttgaag ctttgagcaa attcaaacia caatcacttt ttactcagat 300  
 gtctgattgt cgcccgaat atatcgagac gctcgaaatt gaatgttgaa gctctgagcc 360  
 aattcacacg acaataacgt attactcgga tgattgactg agtgccgtat ataacaagac 420  
 gctaaaattg 430

<210> 5007  
 <211> 660  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5007

cttatagagg ccttttggat ctcatgcctc acacaatttt aaaagcatgt tcatgaaaac 60  
 ctgtaaatac agttccacta tcaaatatca tataaactaa ctaatacaaa tgataagaaa 120  
 tgcctaattg tgccttgcct caataaaatt tgcatacagg aacatggcac ggcaagtgtc 180  
 tcggtctctt ctgtaaggag atatcagact agcaacacat attaagccag catcagcaaa 240  
 cagttttgcc acttctccta gattaaataa tttttttatc agtaaaacca agttgatatg 300  
 catcagattt tttaatacac tacagctata tacaataact ttgaaggatt aatagattat 360  
 ttttcatcat ggaactaatc caaatacact aatattgatt agaagttttt ttcattgtaat 420  
 aagttggcca agagtagatt gcaatattgt gtagactgca aaccaaccat tttgagaaag 480  
 gtgaagtgtg tcccacaaga aagaagatt cgggttctca cataaactgt atttctttga 540  
 tccttcgtca tccacacttn cacatgaatc ttccacttgt ttccctcaca gcatggttgc 600  
 aacggattca tcagtgtaga cttttctgca taatgtagaa agaaaaaaaa ctgtcatcat 660

<210> 5008  
 <211> 500  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5008

agcttttaaa attaaggatc ttggtgattt gaaaattttc cttggtttct aagttgcaag 60

aagtaaagtt ggtattaaca tttctcaatg caaatatgca cgtaagctat tatataatgc 120  
 tggtttattg ggttcttgcc ctgtagtac tccaatagat tacaacacta gaattcatca 180  
 caattcaaga ttacatttgc ctgatccttc atcatataga tgcctaattg gtagattgat 240  
 ctatttgacc aatactcagt ctgatattac atatgttgta caacatggtt gtcaatttat 300  
 ttatactccc actactgcac atcagcaggt agtagcttgt atccttcgtt acattaaggg 360  
 tgctcctagt ttcgatctct tctaaccagc aaataatact gctaaactca aagcctttag 420  
 cgactttgat tgggctagct acataaagac tagacattcc atcattggat tntctattta 480  
 tcttgggtct tgtcttattt 500

<210> 5009  
 <211> 456  
 <212> DNA  
 <213> Glycine max

<400> 5009

agcttcatgg ggcaacattg aattattccc cgtatgacaa agttgtgtat gctttggtaa 60  
 gagctttata gacatggcaa cactatttat ggccaaggga attcataatt cattttgacc 120  
 atcaaagttt gaagtttcta aaatctcaag gtaagcttca aaagagacat gccaaagtgg 180  
 tggaattaat taagatgttt ccttgtgtga tcaagtacaa gaatggtaag gaaaacatag 240  
 tggttgatgc tttgtccaga aggtatgttt tgcttacttc tttgcaaact aaattgcttg 300  
 gttttgagtt tgtgaaggac ttgtatgcta ctgattctaa ctttggcaaa gtatgagatt 360  
 cttgttctaa acatgctttt ggaaattata tagacatgat ggtttattgt ttaaaaaaat 420  
 aaattgtgtg tgcctatgtg gtccttgtgt gaaatg 456

<210> 5010  
 <211> 640  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5010

tccttcaatt ggacaacagt ggtgtgcctc ttaatatcac cacctaagta gtgtttggtt 60  
 ctactgccac gctgtccatg tccttttggt gggtgggtcc tccaatatca ccactccaag 120

tggcataact tcattgatga agaattggtct agaccacttg gatttcagct tacctagaaa 180  
 caatctcaat ctagaattaa ataacaaaac ctgttgacca ggctgaaaat tcctttctga 240  
 aagcttttta tcatggtaaa ttttaactct ttgcttataa atcttggaat tctcataagc 300  
 ttgaaacctc agttcctccc attcatgaag ttggagcttc ttattttcac tagttgcatt 360  
 tgagtcaaaa ttcagaaaact tcaatgcccc ataagttttg tgctccaact caacaagtag 420  
 gtgacaagat ttgcataga ccaattggaa gggagtgcac cctgcatgag ccttgatgtg 480  
 tgttctgtat cccccacana gcttcttcta gtacttgnga ccaatctttc cttgattgag 540  
 caattgtttt ctctaagatc ttcttggtt cctgtttaga actntagctn gtccattggt 600  
 ctgggggtgg taaggagaag ctaccttggt tctaacta 640

<210> 5011  
 <211> 295  
 <212> DNA  
 <213> Glycine max

<400> 5011  
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 cgggcctatg cacgtaccaa accttgaaag aaacaagcag gccacaaatg ctggggcaga 120  
 tttttaccga tgcaccttga tgtatttttc tctagaaact tcattacgat gcttgcttct 180  
 caagctttat ttctaagact ttaacacact acagacattg tcttaaagat aacaacggac 240  
 agatcatgga gaggagtttg gagcagcagg atacctgaat tcgagacaat tgaac 295

<210> 5012  
 <211> 608  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5012

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 tctcgagagc ttccgttggt taatttcaag cttcttaata tattatgtgc ctgaatcgga 120  
 cttctgtgtg ataagttatg accatttgaa tttctcgaga gcattcgggtg ttcattttca 180  
 agcttctcga tatattgtgc acctgaatcg gacttccgtt tgaagagtta tgaccttttg 240  
 aatttctcga gagcttccgt tgtttaattt caagcttctc gatataattt gcaccttaat 300

cggacttccg tgtgacaagt tatgaccatt ttaatttctc gagagctttc gttgttcaat 360  
 ttcgagcttc tcgatatatt atgcacctga atcggacttc cgtgtgaaaa ggtctgacca 420  
 tttgaatttc tcgagagctt tcgctgggtca atttcgaggg tctcgatata ttatgcgctt 480  
 gaatcggact tccgtttgaa aagttatgac catttgaatn tctcgagagc tttcgttggt 540  
 caatttcgag ggtctcgata tattatgcgc ctgaatcggc cttccgtgtg ataagttatg 600  
 acccattg 608

<210> 5013  
 <211> 335  
 <212> DNA  
 <213> Glycine max

<400> 5013

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 gaagtccaat tcaggcgcgt aatatatcga gacgctcgaa ttgaacaccg aatgctctcg 120  
 agaaattcag attgtcataa catgtcacag ggaagtccaa ttcacgaacc taatatatct 180  
 agactcttga aattggacaa cggaagctgt tgagaaattc aaattgtcat aacatgtcac 240  
 acggttatcc aattcaggcg cgtaatatat cgagactctc gaaattgcac aacggaagct 300  
 ctctagaaat ttaaatgagc attacatttc acacg 335

<210> 5014  
 <211> 501  
 <212> DNA  
 <213> Glycine max

<400> 5014

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 tccgattcag ggcgataata tattgagatg ctcgaaattg aacaacaaat gctctcgaga 120  
 aattcaaattg gtcataactt gtcacacgga agtccgattc aggtgcataa catatcgaga 180  
 cgctcgaaat tgaacaacca aagctctcga gaaattcaaa tggtcataac ttatcacacg 240  
 gacgtccgat tcaggcgcgt aatatatcga gacgctcgaa attgaacagc gtatggtgtc 300  
 gagaaattca aatggtcata acttgtcaca cggaagtccg attcaggcgc ataatatatc 360  
 gagaagctcg aaattgaaca acagaagctc ttgagaaact caaatggtca taacttgtca 420

cacggaagtc cgattcaggc gcataatata tcgagacgct cgaaattgaa caacgaaagc 480  
tctcgagaaa tcaaatgggc a 501

<210> 5015  
<211> 327  
<212> DNA  
<213> Glycine max

<400> 5015

agcttgaaat tgaacaacgg aagctctcta tatattcaaa tggtcataac ttatcacatg 60  
gaagtccgat taaggcgcac aatataccga gacgctcgaa attgcacaac ggaagccctc 120  
aagaaattcc aatggtcata actatcacac ggaagtccca ataaggcgca taatatatcg 180  
agaatctcga aattgaacaa ctgaagctct tgagaaattt aaatgggcat aacttatcac 240  
acaaaagtcg gattctggcg cataatataa ctagacactc taaattgaac aacggaggct 300  
ctctagaaat ataaatgggtt attattt 327

<210> 5016  
<211> 500  
<212> DNA  
<213> Glycine max

<400> 5016

agcttggttca agatatgctc cgcaactttt gtctagccac ggggctagag gtcaatgttt 60  
agaaatctaa attctctgtc tctaaaaatt tgaggaggta gaaagttgat aaattcacca 120  
ccattctaga tttctacac actcaacatc tggggaaata tttgggattc cttttattag 180  
ttgggcagaa caaagaatac ttaattttct ttcattttgg acaaaattga taaaagaatt 240  
gttgggtgaa agagcaaagt tcttaacaga gctgggagga tcactcttgc aaactcagtc 300  
atgtttgcaa tccctaccta tcctatgcaa aatttgtaga ttccttaagg tatttgtaat 360  
acaatcgatg ctataagaag ctttatatgg tggactgggc gactattaca aaaccgcgcc 420  
acataggggg ttttgacata agcgagagta cgccattcca cattgtctta ctatgaaaac 480  
atgtttgggc tctcatgaac 500

<210> 5017  
<211> 522

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5017

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 tagacctcca atcttcaatg gagagggtta ccactactgg aaaacccgaa tgcaaatttt 120  
 tattgaggca atagatctaa atatctggga agccatagaa atagggcctt atatacccac 180  
 cacagtagaa agagtttcaa tagatggtag ttcacatcaagt gaaagcatag ccatagaaaa 240  
 acctatagat atatggtctg aagaagatag aaaacgagta caatacaact taaaagccaa 300  
 aaacataata acatctgccc tgagaatgga tgaatatttc agggatatcaa attgtaagag 360  
 tgctaaggaa atgtgggaca ctcttcgatt aacacatgaa ggaactacag atgttaaaag 420  
 atctaggata aatgcactaa ctcatgagta tgaattatnt ataatgaatg caaatgaaaa 480  
 tattcaaaac atacaaaaga gatttacaca tatagtaa at ca 522

<210> 5018  
 <211> 639  
 <212> DNA  
 <213> Glycine max  
 <400> 5018

ttggagtttc caagtgccaa ttcgtcttct tctttagtc agtcttcttc tggcttcaat 60  
 tcatcagtgg gctttccttc tgtgtccaac atcttgggat gttcccagcc tttgatgaca 120  
 gctttccagg ttctgctatc cagtgatttg aggaaggcca ccattcttgc tttccagtat 180  
 tcatagttag ttccatcaag aattgggtgg ctgttctactg gtctctcttc tttctccatg 240  
 ttcacagaa tttatctccc tagatctcac tctgtgattt cgagtgttgg ctctgatacc 300  
 aattgaaatt ctgataccag gggacagatg tcgtacagga tgtcacgaca tcacgcttca 360  
 gaacatgcag tttatatgtg tctgtatgaa cagattaaac aagtaaataa cacaagagaa 420  
 ttgttaacct agttcgggtgc aacctcacct acatctgggg gctaccaagc cagggaggaa 480  
 atccactctc aatagtgtta gttcaaggtc taacagcccc tgtttacaac cttctcacct 540  
 aaccactacc cgtgcgatct ctacctaaga gccactctta gatatgagaa cctctgctca 600  
 ctccctctca ctcacactcc cgtgtttaca attaagtca 639

<210> 5019  
 <211> 564  
 <212> DNA  
 <213> Glycine max

<400> 5019

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 catccagcag aggtatgttt acctctactt ttctaaatgt ttccaatata tcctttctcag 120  
 tatcttccat ttttttggtg gaaattgctc ttggagggaa tgaaagaggg atatgttgct 180  
 tctctttaga ttcacctgca tagaaattgt taggtaactt actctttaaa tttttgtcat 240  
 catctttttc tggagtagag tgaagttggg caggttcatt tgcagatgag gaagatgttg 300  
 ctggttgagg ttcttgacac tgctttcctg acctcaatga aatgacactc acatttttgg 360  
 gattctggac agattgagaa ggcaatatgt cagaattctg ggactgttgt tgatttaact 420  
 atgtagccaa ttgtcccatc tgattagtta agctctgaat ggaagctctg gtatcttggt 480  
 gaaactgcat gttttgcata gtcatttgcc tcacaagttc ttcaagggaa ggttgcgaaa 540  
 gagcctcaac tgtttgctat ttct 564

<210> 5020  
 <211> 567  
 <212> DNA  
 <213> Glycine max

<400> 5020

tctacagaag gtttgttctt aattttctta caattgcctt acctctcaat gagctggtga 60  
 agaagaatgt ggcatttact tgggggtgaaa gacaagagca agcctttttt ttctcaaaga 120  
 aaagctcatc aaggcacttg ttctagctct tcctcacttt tctaaaactt ttgagctaga 180  
 atttgatgcc tctggagtgg gagttggagc tatattgtta caaggcgggc accctattgc 240  
 ttatttttagt gaaaaacttc atggtgcccc cctcagctac cccacctatg ataaagaact 300  
 ttatggccta attagaacct ttccaaactt gggaacatta cctgggtttcc aaggaatttg 360  
 tcattcatag tgatcatgaa tcacttaagt acattagatg acatagcaag ttaaacaaaa 420  
 ggcattgcaa atgggtagag tacctagatc aatttccata tggtataaaa tacaaaaaag 480  
 gaaaaacaaa tgtggtagct gatgccctct ctaggaggca cacattgttt ttctccttgg 540

gaactcaaat tttaggattt gataaca

567

<210> 5021  
<211> 523  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5021

agcttctcca cttgtaactt gggcctaaat tcaaatagca tggttaacac ttgttgaaga 60  
gcttccttgg ccttctttga tctagccctt ggcataagtc ctccaagtcc ttctaaaggt 120  
tccttgccct tagtccttgc atgtcctcat cacatgtgga aaaaaatgtg tgtgatagtg 180  
taatcagcat gcttcttaac attaaaggta agacaaagga tgatttgaat actcgtcaag 240  
atctagctga gatgggtata cgtgaccaat tacatccaat gttttaatta aataaagagt 300  
cttgtaacc agtgccttta acgtattggt taaggaatta aaaaagaaat gtatttatta 360  
tgtaaattat aggagagtgt aaaaaagat catgggcaac acaatttttc acctctcaat 420  
aaaaacattc ctattttatg ttttttaacc attaccctta ngacactagt tagcatttaa 480  
cttaaataac aatgaaaaca ttaatttcat tatgtgtgag act 523

<210> 5022  
<211> 459  
<212> DNA  
<213> Glycine max  
  
<400> 5022

agcttatgct gctaacatct acagtagacc tcctttttct gagcagcaaa atcacccaca 60  
acagaacaat tatgacctct ccagcaacag gtataatccc gggtaggagga atcatcccaa 120  
ccttagatgg tcgaatcctt cacaatatca gcaacaaca caacaacctt attttcagaa 180  
tgctgctggc ccaagcggac catacgttac tacaccaatc cagcaacaac aacagctaca 240  
acatctgcag ctgcagccac ccagaaaaca acaaatagtt gaggctcctc cgcaaccttg 300  
ccctgaagaa cttatgacgc aaatgactat gcaaaacatg cagttttaac gagagaccag 360  
caccttcatt tatagcttaa ctaatcatat gggacaattg gctacacagt taaatcaaca 420  
gcagtccgag aattctgact gattactttc tcaatctgt 459



<210> 5023  
 <211> 538  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5023

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 gctcacctcc ttgagatgag aagctagagc ttagctacac accccctata atagctaagc 120  
 tcacccccat gacaaaaaaaa agatgaaaat acaaaaaaaaa aagtccttac tacaaagact 180  
 actcaaaatg ccccgaaata caaggctaaa accctatact actagaatgg ccaaaatata 240  
 aggcccaaac gaaggaaaaa cctattctaa tatttataaa gataagcggg ctcatactta 300  
 gcccatgggc tcaaaatata ccctaaggct catgagaacc ctagggcctt cccttggatc 360  
 tctagcccaa tctacttga gtcttctacc caatgccctt gcgggataag atttcatcat 420  
 tccctccacc ttggaaagga tttgacctca aatcccaagg ttcttcatac tctgggctcc 480  
 ttccctcaac acctgtaaaa agaaaaaaaa catatgtatt antggtgttt ggtatgtt 538

<210> 5024  
 <211> 397  
 <212> DNA  
 <213> Glycine max  
  
 <400> 5024

agcttctcgg tatattatgc acctgaatca tacctccggg tgacaagtta tgaccatttg 60  
 aatttctcga gagcttccgt tgttcaattt cgagcgtctc gatattctat gcgcttgaat 120  
 cggacctccg agtgagaagt tatgaccatt tgaattgctc aagagcttcc actgttcaat 180  
 ttctagcgtc tcgatataat atacgcgtga atcggacctc cgagtgaaaa gttgtgacca 240  
 tttgaatttc tctagagctt cggttgttca aattcaagcg ttctgatatt tgatgtgcgt 300  
 gaatcagacc tccgagttag aagttatgac gatttgaata tctcgggagc ttccgttgtt 360  
 caattgcgag cgtcactata tgtcatgcgc cggattc 397

<210> 5025  
 <211> 544  
 <212> DNA  
 <213> Glycine max

<400> 5025

tactttgaaa tttgtgattc aatatgatgt atgctagttt atatatagag aagtagttat 60  
ttatattaat aatttatgta aatagtattg tagagtgtta tagtatgatt ccaaaaatta 120  
ttaagtgttg gagtttgaga atattatggt taaatttgat gaacatgtgt atgttgtacc 180  
ttacgaatat cattaggaat gttatgagat ggttgatgtg atgttatgag atgttaaagt 240  
gtggacatga tatttgattg tgaataagtg gatgtgttta acacttgatg ttacattaat 300  
tatattttga gctatgaatt atacaataac tcgaccagtg tttatgcgca gtgttaaaga 360  
gaaagtgtag gttcctagtt aggaaccagt gttaaattgt agcgcaatgt gttaaacatg 420  
tttgaaacat aagtgtgagg tcgtggtatt gtgtaattca tgagttgtgt ttataaatgg 480  
aatatgtgat gaattgtgga ataacatggt gctttgagat ttaatatgtg gtattgagat 540  
tgag 544

<210> 5026

<211> 507

<212> DNA

<213> Glycine max

<400> 5026

ttaaaatttg aattaaacg ttcacaaact gttggtaatc gattaccata tatgtgtaat 60  
tgattacaca gggcaaattt tgaattcaaa ttttaatagc tgttgtaaat ccgttttggc 120  
cactggtaat cgattacatc ctctggtaat cgattaccag agagtaaatt tgttgaagaa 180  
gactttttta cttgtaatcc ttggccaaac cttttgctac ttcaattgga attcccttcc 240  
tatttaatat accctttcta agactctata gactgtcttg atcatccatc ttgaatatct 300  
ttaatttctt tgtcttgagt aaatctttga gaagcatatg attcatgtaa tcctttggca 360  
tcatcaaaac attcagctta atcctttgtc tacaccacg ttctactatg aaaagctgat 420  
tggtcatatg ccagctaact ttgcggatct cgtcttcgcc ggagaaagga ttgaatcccg 480  
actacaaaaa ggcaagttcg aatatgc 507

<210> 5027

<211> 497

<212> DNA

<213> Glycine max

<400> 5027

tcttagtttc agatgatgca gatgggtttg tagctacctc atgcactcct ctaatgacta 60  
tggcatcatt tctggcgcta aactgctggg agttggaggg catcttctca attaaatttc 120  
tggcttcagc aggagtcag tctccaaggg ctccaccact ggcagcatct atcatacttc 180  
tctccatatt actgagtcct tcataaaaaat gttggagaag aagctgttct gaaatctgat 240  
gggtgaggga actggcacat agtttcttaa atcgctccca gtactcatatc aggcctctctc 300  
cactgagttg tctaatacct gagatatctt tcttgatggc tgtggtcctg gaagcagggg 360  
aaaaattttc taagaatact ctcttaaggt catcccagct cgtgatggac cttggagcaa 420  
ggtaatacaa ccagtccttt gccactccct ctaatgaatg aggaaaagcc ttcagaaata 480  
tgtgatcctc ttggaca 497

<210> 5028

<211> 502

<212> DNA

<213> Glycine max

<400> 5028

agcttgtgtc acactttcaa ttgtctaate tgaatacata gctgcaagaa gttgttgtgc 60  
tcaaagtctt tggatgaagc aacaatgatg taagctccat tggagcttgt aagcctagga 120  
tcttcttcat caatggattc ctttgcttct tggaagatga atggcagcgg aatggagaaa 180  
ggaagagaga gaggagacgc cacttcaagg agaagatgag tctaaaagaa gctcaccacc 240  
atatgaggcc atggataaga gcttggatga agaatagat gaatgaaggg agaggagag 300  
aagagcacga aattttgtgc tctacatgag ctctgagatc tgaagttaa tattcaaatg 360  
atcaaagttg aaaaaaatgc acacacatga cctctattta tagcctaagc gtcacacaaa 420  
attggaggga aattcagaat taacttgaat ttgaaattga atttgtggag tcaaactatg 480  
gaccagaat ttcactaaat at 502

<210> 5029

<211> 614

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5029

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 gttaggatta aggaacctag ctatgaggat atctgcctgt ccttgtgcat gctgattttt 180  
 cttcaaagaa aattacgttt taactaatgg gatgcgatat atatattgtg atgaatgata 240  
 ttgttttggc tgtttgaagg ctgtgctgga ggaaatgata ttgttgtgtt tgtttgaatt 300  
 gttgttgatg ttgctattga ggattttaat tgatatgtga tgataatgat gattatgatg 360  
 atattgattt gagatgacat tgttaataaa gaccatgtca acatgaattg ttattattga 420  
 tgaatatgtg aatatgaaat gatgttgttg ttgttgttga taacgtcatt gagatgagat 480  
 gatatttatg ttgtgaatga catggaaata cgatttgctt attgatgttg gaaatgcatt 540  
 ggcattgtga tgttgtgtat gttcgtgggg ggcactgtgc actgaccttt cannggtctt 600  
 tggcattagc tttt 614

<210> 5030  
 <211> 595  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5030

agcttgcttc ttgcgattcc aagacacaag atatcttctt aatagggtggc atgtaatttg 60  
 caacctgcac aatcagaatc tctatatctt gactcatcca ctgatttacc tttctcatct 120  
 aagtcaaggt atgttgaagt ggtcgttgga gtatatgggt ctttgcattt tttatgccaa 180  
 atttcttaat tagttctata gagtatttgg ttgacatag gaaggttcca tgtttcatct 240  
 actgcacttg gagtccaagg aagaaattta actcaccat catagacatc tcagattcct 300  
 tctacataca actagaaaat tccttacaca aaatttcatt actagcgcca aatataatat 360  
 catcaacata tatttgaaca atgaacaact cactatttac tttcttaata aacaatgttt 420  
 tgtcaacttg gcctctagt aaagattgct taattataaa actgtttaat ctatcatag 480  
 atgaccttgg tatttgtttc aaaccatata nagccatttt tagtgtatag acatcttttag 540  
 gatgttcata gtccacaaaa cctgggggatg acctatatat acttcttttt caatg 595

<210> 5031

<211> 647  
 <212> DNA  
 <213> Glycine max

<400> 5031

agcttgtgct tcaagcataa agggaaataa ttaaataatga caccatattc atttttgtgt 60  
 taaggttgtt tgcatacata tattcataaa ttcttactg tattcagtgt attgcatatt 120  
 tgcattgaat acactttaag tttgttaagt atatgtcgaa ctaaagtgtat cattgcattg 180  
 tttgctaaaa aaatgtttga gctaaagtaa ctctcttaaa aagggtttgt tcaacttaat 240  
 taaataataa atatgataat tgactagtta gataagatac atcaattatg atctagttta 300  
 ccgcgcactt taaggttaag ctgcgttcgt cctgcttaat ccgcctgata aaacattaca 360  
 accgaataaa tgacaagcat aggtacatgt tctaattcat ttcaccaaca aaatattgcg 420  
 ttttttcttc ttatttttacg cttcggctaa tgcatttata aaagattaag agattatttt 480  
 gtttcacaaa acatattttg ttttaagttg atatacgaaa attgaaacac aaaattgaaa 540  
 cggatataat agaaaattat ttacactatt gtcataagtg tttaaaaaaaa agaaataaag 600  
 tgaaaaaatt gtgacatttt ttaattaaaa agaaaaataa attttttt 647

<210> 5032  
 <211> 447  
 <212> DNA  
 <213> Glycine max

<400> 5032

tccaatttca ttttggagcg tctcgatata ttacgggact ctattgggca tccgagtaaa 60  
 aagttattgt cgtttgaatt tgatacgagc ttccattttc aatttggagc gtctcgacat 120  
 attacgggac tcaatcggac atccgagtta aaagttaatg tcgtttgaat ttgatacgag 180  
 cttccaattt caatttggag cgtctcgata tattacggga ctctattgga catccgagaa 240  
 aaaagtcatt gtcgtttgaa tttgatacga gcttcccttt tcaatttggga gcgctctgat 300  
 atattacggg actcagtcgg acatccgaga aaaacttatt gtgctttgaa ttttctagga 360  
 gtttctgttt tcaatttcgc gcggtctgat atattatagg actcaatcgg acatccaagt 420  
 taaaagttat tgcggttttc atttgc 447

<210> 5033

<211> 444  
 <212> DNA  
 <213> Glycine max

<400> 5033

agcttgatc aaattcaaac gacaataagt tttttctcgg atgtccaata gagtcccgt 60  
 atatatcgag acgctccaaa ttgaaattgg aagctcgtat caaattcaaa cgacattaac 120  
 ttttgacttg gatgtccgat tgactcccgt aatatatcgt gacgctccaa attgaaaaca 180  
 gaagctctaa gacaattcaa acgacaataa ctttttattc ggatgttcga ttgagtcccg 240  
 taatatatcg agatgtccca tattgaaaac ggaagctcgt atcatatgca aaccacaata 300  
 actttttact cggatgtccg attgagtccc ataatatatc gagacgctcc aaattgaaaa 360  
 cggatgtcgc tatcaaattg aaaccgcaat aacttttaac tcggatgtct gattgagtcc 420  
 cgtaatatat cgagacgctc caaa 444

<210> 5034  
 <211> 479  
 <212> DNA  
 <213> Glycine max

<400> 5034

agcttatgac catttcaatt tctcgagagc ttctgttggt caatttcgag cgtctcgata 60  
 tgtgatgttc ctgaatcaaa ccttcgtgtg ataacttatg accatttgaa tttctcgaga 120  
 gcttccgttg tacaatttcg agcatctcaa tatatgatgt gcctgaatcg gacatccgag 180  
 tgaaaagtta tgacaatttc aattttctcaa gagctttcgt ggttcaattt cgggcgtctc 240  
 catatgtgat gtgcttgaat cggacatccg agtggaaagt tatgactatt ttaatttctc 300  
 gagagcttcc gttgttcaat ttcgagagtc tcgatatata atgcccctga atcggacctc 360  
 cgtgtgaaaa gttatgacca tttgaatttc tcgagagcga ccgtttttta atttctagcg 420  
 gtctgatatt tgatgtgcct gaaacggaca ttccagtga aagtttgacc attttaact 479

<210> 5035  
 <211> 513  
 <212> DNA  
 <213> Glycine max

<400> 5035

agcttgcaga ccagggattt atctgcaact tcaaaactag gaggctgagt cataaataca 60  
 tatccctcaa gcaacccatt aagaaaagca ttgttgacat caaactgaaa taactccac 120  
 ccttgagaaa gagcaagagt gagaataaca caaattgtga caggcttgac cacaggaaaa 180  
 aatgtctcat gaaaatcaaa tccatgaacc taatgaaaca aacccttag caaccagttt 240  
 ggctttgaac ttgttgatag aaccatcaac attttctttt actctgaaaa gccatttgca 300  
 cccaatagct tgcctattag gaggtagggg aaccaagtcc cgagtctgtg ttacagtaa 360  
 agcatcatat tcctcttgca tagctgtaga ccaatctgaa tttccaggg cctctttgac 420  
 agtcttgggt tcaaaatgag caaggaacag tgaaggatgt aggctaggat tatgaattcc 480  
 agacttgac ctaatttgca taggatgagt gtt 513

<210> 5036  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<400> 5036  
 tatcgtcatt ggaaagagat cattaaaatc accaaatatg caccaagcac caatagagga 60  
 atgagctaaa gatcacaaaa gattccatga accttttctc ttatctctct tttggaatcc 120  
 atagtaaact attaaactcg agacaatttt gacaagatgg attttcatgt tgataaaatt 180  
 aaaatagtag ttaagagac aacaattaaa ggggggtttc caaaacatag tcagcccacc 240  
 actccggcct ttagcatcaa caaaaaaaaa agcataaatc aaaaccaatt tgaatacaaa 300  
 tatcatcaat atgctaagag taaacacgag ttccacataa taaaatgata ttccaatgag 360  
 atcttttagg gtaggaattg tgctcgggtt gcccaagccc tgacagtttc aactttgaga 420  
 ctaatcttcc ctg 433

<210> 5037  
 <211> 694  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5037

ttgagccaaa atcctgactc accataaacc ttgaccagg gtgagaatgt caatccttac 60  
 cttcggaagc gaaaagaata gaagggaat ttccaatcaa agaaaaggaa agaaggaaga 120

tttccaatca aagagaaagc aaaaaaagaa aagaaggaaa attcccaatc aaagagtggg 180  
 agaaagcaaa aagaaaagaa agaaaattcc caatcaaaga atgggagaaa gaaaaaagag 240  
 aaaaggagga aagaaagctc ctgatcaagg atcgaaagaa aacagaagaa atgtgcagag 300  
 aagtcttttg accggacaat atctgaacaa tacagaattg tcaccaaagc aaaaaaagg 360  
 gaaggaaagg aaaccacgac ctaaaatggc cttctccctt tgattaccaa ccaaaatccc 420  
 gtgcgctagc gacttttttt tctcgccccg cactaaacaa aaaaaaaca gaaaaagaaa 480  
 aagccagaaa aatcaaaagc caaaaacaca caaaagccga aaaaaaaac caccaaaaga 540  
 acccattccc aagggaagcc ctattgatcc ataatcgcg atgtaatttt tgatttgata 600  
 ggaaataatt ngcaaagtca agtcatgaca tatctatggc tcggaattag gatgaaacac 660  
 ttacctgtgc aagattgata cactttgagt gatt 694

<210> 5038  
 <211> 347  
 <212> DNA  
 <213> Glycine max

<400> 5038

ttggagtgtc caagcgccgc tcttctctca cccttaatgc atttttcttc aggcttcatt 60  
 tcatcaatgg gcattccttc tgtattccgc atcttgggat gtccccagcc attgacgaca 120  
 cacttccagg ttctgatatc ctaggccatc gcgaaggcca ccatactcag ctctccaata 180  
 tccacactat gtgtcatgaa gagacggaag tctgcacact gagcctacgt ctttatccat 240  
 gtttatcaga atatatctcc ccacacctca ctctgagaat acaaagaagg ctcttaaacc 300  
 aataggaacc ctgataccaa agtacatatg tagttcagaa cgacaca 347

<210> 5039  
 <211> 387  
 <212> DNA  
 <213> Glycine max

<400> 5039

agcttttctt tgaccgaagc taaggctgaa tcttggtttt caccctatac acatgccatg 60  
 ttctttcttca ccactatta gaaagggtgac gcatttgaat aaaagatagg aactaacctt 120  
 atatataagc ttgctaacca atggaagctc ctaatatctc cgacacatta ttgggtgctc 180



cattctagaa tagtcgtgat tgtctcatgg tgcacttcga ccccatctct accaactcct 240  
 aaacctcaga gaactatatt atctactcac aatgtacact tctctatata tgcatagagg 300  
 gagttttctc tattgactga aacaacttgc ctgagatgta ctcattgatc atataagctc 360  
 atatggccca ctaaaatata ttaaaaa 387

<210> 5040  
 <211> 570  
 <212> DNA  
 <213> Glycine max

<400> 5040

atactcaagc tttgagccac ttcaaacgac attactttt tactcggatg tcttattgag 60  
 tcccttaata tattgagacg cttgaaattt tatgttgaag ctcttagcca attcaaacga 120  
 caataacttt ttactcggat gtccgattca gtgacgtaat atatcgggac actcgaaatt 180  
 gaatgttgaa actttgagcc aattcaaacg atgtctgatt gagtcccgaa atgtatcaag 240  
 acgctcgaaa ttgaatgttg atgctttgag caaattcaaa agacaaaagc tttttactag 300  
 gatgtttgat tgagtcccg taaatatcca gccgctcgaa attgaatgtt gaagctttga 360  
 gcaaattcaa acgactatat ttttttactc ggatgtctga ttgagtcccg taatatatcg 420  
 agacgctcga aattgaatgt tgaacctctg agccaattca aacgacaata actttttact 480  
 cggatgtctg attgagtecc gcaatatatc gagatgcttg gaattgaatg ttgaagcttt 540  
 gagacaattc agacgacaat aactttttac 570

<210> 5041  
 <211> 491  
 <212> DNA  
 <213> Glycine max

<400> 5041

agcttcaaaa ttcacttttcg agcgtctcga tatattacgg gactcaatta gacatccgag 60  
 taaaaagtta ttgtcgttgg aattggctca gagcttcaat attcaattac gagtgtctcg 120  
 atatattacg ggactcaatc agacgtccga gtaaaaagtt attgtcgttg gaatttgctc 180  
 atagcttcgg cattcaattt tgagcgtctc tatatattac aggactcaat aagacatccg 240  
 actagaaagt tattgtcgtt taaatttgct caaagcttca acattcaact tcgagcgtct 300

tattatatta taggactcaa tcagacttcc gagtaaaaag ttattttcgt ttgaatttgc 360  
tcaaagcttc aacattcaac ttcgagcgtc tcgttatatt ataggactca attagacatt 420  
cgagtaaaaa cttattgtcg tttgaatttg ctcagagctt caacatcaat ttcgagcgtc 480  
tctatatatt a 491

<210> 5042  
<211> 651  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5042

tggaacatat atactgaatc ctagttcttc ttaaggactt atttagaata tttgccgggtt 60  
ggtcattaga attaataaac tcagtataaa tctccttgga caatagtctt tctcgaatga 120  
aatgacaatc aatctctgtg tttagtcttc ttatgaaaga ctgaatttga ggcaatgtga 180  
agagctgcct gattatcaca gtataacttc atttgcacaa cttcacaaaa tcccaactct 240  
tggagaaatt gtttaatcca cataagttcg catgtaacca tagtcataga tcgatattca 300  
gcctctgcac tggatcgagc aacaatagtt tgtttcttgt tcttccaaga gataatattt 360  
cctccaataa aaacacaata tcttgaggta gatcttctgt ctatgggaca accagtccaa 420  
tctgcatcac aatatccaga gacttgagtg ttacccttgt tttcatacaa caatccttgt 480  
cctagagcct tctttacata tctgagaata cgcatacga cattccaatg atcaacatga 540  
ggattntgca taaattgggtt aacaacccca acaacaaaag aaatattang tcttgtaatg 600  
taagataagt gagttttccc acaagtctct tatatctctc gggtttgatc t 651

<210> 5043  
<211> 451  
<212> DNA  
<213> Glycine max

<400> 5043

agcttggctg aaatgggtact tggtgtttc atctttatct ctttaattact atctaactcat 60  
tatttgatta gatagtaatt agtgatttag tccttattac acattatttg attgatacta 120  
tgtaatgaat actgatccca tttactcggt ataaataaag gcttggtgtg gccatccaag 180

acacaacatt acagaaaaac actgttatag gtagcataaa ataaagactt ttgaggggta 240  
ctaaggacta actcaagggtg ttgtaagtgc tcttgccatg tcttgctata tataagtgtg 300  
ttataaaaaa acacaaaaac aaatgtacta agatacagct gcaagcgtga gttcattgta 360  
cattgaaatg tggcaaagac attgggttata gcccaaaagg aataaccaag aactcaacaa 420  
caagttccga atgagcttca ttcccaacac a 451

<210> 5044  
<211> 529  
<212> DNA  
<213> Glycine max

<400> 5044

tatcactgcc tcacgaatgc ccacctggt ctaaattgga cgtgatagaa catgcataat 60  
cacatagaag gtggtttcta gtagaagaaa aaatgtaatc caagtaagtg caattgggtt 120  
atctggagct acagaggggt ggcactgaat catgcagact gccttctgtt atagcgatta 180  
attgaagttt tctttcatgc cctgaacgtg aaatacagtg ggtcttataa tacttttata 240  
atattatgcc atgtgagtat aatgacaacc ttttcatatc ctttcagtgg tttcggtcat 300  
gtcatttaaa gttttatttg aaaagaaaat ttataaaatt gtttttatag agaaggaact 360  
atattggaat tatacattaa tgtgggattt tgtaattac caaagatgaa atctatggag 420  
tttgtaattc taaattatat gggtttattga tataacgatg ctatgaaata tttatatattg 480  
gatttaataa aactgttaat tataagatat atatatatat atgaattat 529

<210> 5045  
<211> 470  
<212> DNA  
<213> Glycine max

<400> 5045

agcttatcga tgttggggcaa gggatatgcy ttcttggggc atgacttggt aaggtaggtg 60  
tagtcagtgc acatatgcc tttgccattg gccttttcta ccatgacaat gttggctagc 120  
caagttgaat atctgacctt ctaataaaact aagccttgag taacttgta atctcttgct 180  
tgaccacctt ttgtcgtct tctcccatct ttttttttc ttttgtgaga ctagtttgggt 240  
cagaggatag atggccaatt tgtggcatat gatgctagca tgcataactg gcatattaga 300

caactgtcat gcaaatagat ttgtgtttct tcgtaagact tctgctacat gtttgtactt 360  
 gtcgctaata aagtccttgc tgagctaaat aactaccca ggtttgggtc caagtgtaac 420  
 ttgacaagct ctttgattgt tttgggcctt tataaatatg tcatcacgca 470

<210> 5046  
 <211> 470  
 <212> DNA  
 <213> Glycine max

<400> 5046

agcttgtcaa tgttgggcaa gggatatctg atgtaagctc cattggagct tggaggccta 60  
 agatcttctt catcaatgga ttcctttgct tcttggaaga tgaatggcag cggaatggag 120  
 aacgaagaga gaggagacgc cacttcaagg agaagatgag tctagaagaa gtcaccacc 180  
 atagaaggcc atggataaga gcttggagga agaaggatat gaatgaaggg agaggaagag 240  
 aacagcataa aattttgtgc tctaaaagag ctctgaaatc tgaaatttaa ttttcaaag 300  
 atcaaagttc caaaaaatgc acacacatga cctcttttta tagcctaagt gtcatacaaa 360  
 attggaggga aatttgaatt tctattgaaa ctttacttga atttgaaatt ggatttgtgg 420  
 agccaaattt tggagccaaa atttactga ttatgattag ggaatttagc 470

<210> 5047  
 <211> 511  
 <212> DNA  
 <213> Glycine max

<400> 5047

tcaggttgct cattgactcc agattgctgc aaagaaggac agagatctgt atggtgatct 60  
 acagaagaac atagaccata gactcttgca acaggtgcag atgcagattt ttgattcatg 120  
 gcaagctgag ttactaggta gaccaaggca tcaagtttcc cctcaagctt ttttattttc 180  
 agtagatgaa gatgaatcta tggccacctc atggactcct ctaaggacaa tagcatcatt 240  
 tcttgcggcc tcagttgctt gttgtctttg ttgttgctgc tgctgtattg gaggaggaac 300  
 atatggcttg cttggaccag tagcattctg gaaggaggag acaagctgat gttgttgtgg 360  
 aggacttgct catctcagat ttggatgatt cctccaacct ggattgtatt tgttgcttga 420  
 aaggttataa ttattttgtt gttggtggtt tttctgctga ggggatctat tataaatgtt 480

tgccagcatga gcttcagggtt gctcattgac t

511

<210> 5048  
<211> 575  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5048

ttgagcaaat tgaaatgaca ataactntat acacggatgt tcggttgagt cccgtaatat 60  
atcgagacgc tcaaaattta gatccgaagc tctgagaaaa ttgaattgac aataacttta 120  
tacacggatg tccggttgag tcctgtaata tatcgagacg ctccaaattg aaaacggaaa 180  
ctcttagaaa attcaaacga caataacttt ttactcggat gcccacaga gtgtcgtaat 240  
ttatcgaggg atgctccaaa ttgaaaacga acgctcgtat catattcaaa cgacaataac 300  
tgtatactcg gatattctgat tgagtcctgt aatatatcga gacgctcaaa ttttagatcc 360  
gaagctctga gaaaattgaa ttgacaataa ctttatacac ggatgtccgg ttgagtcctg 420  
taatatatcg agacgctcca aattgaaaac ggaagctcgt agaaattcaa acgacaataa 480  
cttttacttc gatgtccgaa tgaatccgca atatattgag acgcttcaaa ttgagactag 540  
aagctctgag caaattgaaa tgaccataac ttttt 575

<210> 5049  
<211> 493  
<212> DNA  
<213> Glycine max  
  
<400> 5049

agcttttgtt ttcaatttcg accatctcga tatattacca gactcatccg gacttccgta 60  
tataaactta ttgtcaatta aattttctca gagctttgga tcaaaatttt gagcgtctcg 120  
atatattacg ggattcattc agacatccga gtaaaaaatt attggcggtta gaatttgata 180  
cgagcttccg ttttcaattt ggagcatctc tcgctaaatt gcgataggct atcgggcatc 240  
cgagaaaaaa gttattgacg tttcatattt ctaagagttt ccgttttcaa tttggagtgt 300  
ctcaatatat tacgggactc atccggacat ccgtgtataa agttattgac attttaattt 360  
gcgcaaagct tctagtctca attttgagcg tttcaatata ttacccgatt caatcggaca 420  
tgctagtaaa aagtaattgt ccgttggaa ttctacgagc ttccgttttc aatttggagc 480

ggattgacat ttt

493

<210> 5050  
<211> 550  
<212> DNA  
<213> Glycine max

<400> 5050

agcttgtagg ttaagtgaca gtgattgtac tggagatgaa gatgatcgga aaagtactag 60  
tggatttggtg tttttcatgg gggaacacaa cttcacttg gatgtcaaaa aattagtcga 120  
tagtcactct ttcaacttgt gaggcacaat acatagcaac tacttcatac atttgtcatg 180  
cactctggct taggaatttg ttaaaaaagt tgggcatgtc acaagaatag ccgaccaaga 240  
tctttgttga tagtaagtca gccattgttc ttgcaaagac tccactgttc catgatcgaa 300  
gcaaacatat tgatacatgt taccactaca taaggagtg catatcaaga aaggatgtac 360  
atgcacaata tgtgaagtct caagaccaag tagctgacat cttaccaag ctgctcgagt 420  
aagaagactt aatcaagtta agaagcttac ttggaatggt aaatcaagtt taaggggggg 480  
gtgttgaata atataaactt gatttatccc attaatcatg tgttaagtcc cataagtttg 540  
tgctactact 550

<210> 5051  
<211> 434  
<212> DNA  
<213> Glycine max

<400> 5051

tcaaacttgc aacaaaggag ttgagcaggt aaaaaagatt cgtcttcaaa ctcttagagg 60  
tgactttgaa cgtttgttta tggaggagtc cgagtcaatt tctaattatt tttctcgagt 120  
attggtcgta gtcaatcaac ttaaaagaaa tggatgaagat gttgatgagg tgaaggatcat 180  
ggaaaaaata cttcgaactt taaatccaag ttttgacttc attgttacca acattgaaga 240  
aaacaaggat ttaaagacca tgactattga gcaactcatg ggttccttac aagcatacga 300  
agaacaacaa aagagaaaaa ttctacaaaa ggaggctacg gagcaactac tacaactcaa 360  
catatatgaa gcaaactatg catattacaa cagccaaaga ggacgaggtc gcggccaaca 420  
tcgtggacgt ggac 434

<210> 5052  
 <211> 671  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5052

ttgagccaaa atcctgactc accataaacc ttgacccagt gtgagaatgt caatccttac 60  
 cctcggaagc aaaaaaagaa tagaggggaa atttccaatc aaagaaaaag agaaggaaaa 120  
 tttccaatga aagcaaaaaa agaaaagaag gaaaattccc caatcaaaga gtggggagaaa 180  
 gcaaaaagaa aagaaaggaa aattcccaat caaagaatgg gagaaagtaa aaaaagggaag 240  
 aagaagaagg aaagaaagct cctgatcaag gatcgaaaga aaacagaaga aatgtgcaga 300  
 gaggtctttg gaccggacaa tatctgaaca atacagaatt gccaccaaat gaacgaaaaa 360  
 agaaggaaag ggaaccacga cctaaaatag tcttctccct ttgattacca accaaaatcc 420  
 cgtgcgctag cgaccctttt tttctcgccc cgactaaac aaaaaaaaca gaaaaagaaa 480  
 aagccaggaa aatcaaaagc caaaaacaca caaaagccga aagaagagac caccataaga 540  
 acccattccc aagggagacc ctattgatcc atgatcacgc atgtaattnt tgatttgata 600  
 ggaaataatt tgcaaagtca agtcatgaca tatctatggg ttcgaattan gatgaaacac 660  
 ttacctgtgc g 671

<210> 5053  
 <211> 442  
 <212> DNA  
 <213> Glycine max  
  
 <400> 5053

ggagaaccaa gccaatcgga atgctatact atttatatat gggaatatag gtaacaatgg 60  
 cggttatgac ggaccgaggc ataaccgggt tgaggagta aagctcaatg ttcctccctt 120  
 caaaggata agtgatccag atgcctacct gtactgggaa atgaagactg agcacgtatt 180  
 tgcttgaat gactacactg atgcgcataa agtcaagcta gcagcagctg aattctccga 240  
 ctatgccctt gtttggtggc ataaatacca aatagaaatg ttgagagagg aacggcgaga 300  
 ggtatataca tggactgaga tgaaaagggt gatgagaaaa aggtatgtgc ccactatcta 360

taacaaaacc atgcgacaga aacttcaaag gctgtcccaa gggaatttaa ccgtggaatg 420  
 attttaataa agaaatggaa at 442

<210> 5054  
 <211> 492  
 <212> DNA  
 <213> Glycine max

<400> 5054

ttcaagaaat tcaaatggtc ataggttatc acacggaggt cctattcagg aacatcaact 60  
 atttagccga tcaaaattaa acgacggaag ctctcgagaa attgaaattg tcataacttt 120  
 tcacacggag gtccgattca ggcacatcac atatggagac gcccgaaatt gaaccacgga 180  
 agatctcgag aaattcaaat ggtcataact ttacacacgg aggtccgatt caggcgcac 240  
 atatatcgag acggtcgaaa ttgaactacg gaagctctcg agatattaaa atggtcataa 300  
 cttttcactc ggatgtccga ttcaagcaca ttacatatgg agacgccga aattgaccca 360  
 ccgaagatct cgagaaattc aaatgggtcat agcttttaca cggaggtccg attcaggcgc 420  
 atcatatatc gagacgctcg aaattgaaca acggaagatc ttgagaaatt gaaattgtct 480  
 taacttttca ct 492

<210> 5055  
 <211> 582  
 <212> DNA  
 <213> Glycine max

<400> 5055

tgttgtcctc attagtggac gcctctatta aacaagtggc ctcaataact taagaggagg 60  
 gaggggggtg aattaagttt aaaaatttct ccctaataca attttaattc tctcttgaaa 120  
 tagaatatgc aactttaata tgaatgaagt aaagagctat tcaaatgata cttctttaaa 180  
 ataagcaaag caaaaataaa atgtaataaa ttaaagaagt ttagggaaga gagaaatgca 240  
 aactcagttt ttatactggg tgggccacgc cctatgccta cgtccagtcc tcaagcaacc 300  
 tgcttgagat tttcactaac ttgtaaattc cttttacaaa ttctgaaccc cacatggata 360  
 cccttttctt gtgttcagag atccttaca atcaagatac ccactgtctc ttgaacaaca 420  
 gttgtttgct ttaaagtaag aagaatattt ctctcttgta gagaagaatg ttacaagatg 480



aagatcttat tagaattctt attgattttg caagtgtttg accaatgctt tcttttgaga 540  
 agaaaaaaca attattgttc tgaaaaactt tcgagaaatt tg 582

<210> 5056  
 <211> 621  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5056

tcttgcagag gctgaagaat cagctctcgg tgaaatcctt tttatgattt cgttctgttt 60  
 taggtcgaag aagttgggtg aactgatgaa gatgtgtaga gatctgaggc acaagggtccc 120  
 agagatattg gaggtggagg tggatccaaa gggagcacca aggattcaag aggcgataat 180  
 gaagctctac gtttcaaaga gcgcgttcga gaagattcac ttgttgcagg caatgcatct 240  
 tagaatttcc tctctataaa cataatttag aattccaaaa ttttagttaa ttaaaaatta 300  
 tctattaaaa tactgaaatt tcaaatttca gtgaacaaga catccaaaag aaaatttttag 360  
 acttagaaat tttaaatcct ctaaaaaatt actttctttg ctttaaatac tccatccaaa 420  
 cagattctga agagaaaaaa aacattttct taaagtatct tttgtttgaa attaatttta 480  
 aaaataaaaa agaataatta aaaatagaat ttcaattaat tgaaatatat ttttaaaata 540  
 atatcattaa atagggtgaa aaatgggttaa atttatttat atttaagttt aanaattact 600  
 tttggtttat ttaagtcaag a 621

<210> 5057  
 <211> 465  
 <212> DNA  
 <213> Glycine max  
 <400> 5057

agcttcaaca tcagaccact tccaggggtgc tggaactact tcacatggac ttgatggggc 60  
 ctatgcaggt tgaaagcctt ggaggaaaga ggtatgccta tgttgttgtg gatgatttct 120  
 tcagatttac ctgggtcaac tttatcagag agaaatcaga aacctttgga gtattcaaag 180  
 agttgagtct aagacttcaa agagaaaagg attgtgtcat caagagaatc aggagtgacc 240  
 atgacagaga atttgaaaac agcaggttca ctgaattctg cacatctgaa ggcactc 300  
 atgagttctc tgcagccatt acaccacaac agaatggcat aattgaaagg aaaaacagga 360

ctctgcaaga ggctgctagg gtcattgcttc atgccaaaga actttcctat aatctctggg 420  
 ctgaagccat gaacacagca tgctacatcc acaacagagt cacac 465

<210> 5058  
 <211> 492  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5058

tgtaatcgat tacacacata ctgtaatcga ttaccagagg agtttttcaa aaaacattct 60  
 caacagtcac atctttttat ctgattctta agtggccatc aaaagcttat atatatgtga 120  
 ctagagacac gaatttaaca agagttttta agaacaaaaa ggtcttatcc tcttaaaaaag 180  
 caaaatcatt ttaccctctt acaaattcct tggccaaaac tcttgtgatt caataaggaa 240  
 ttatttgagt gctcaaattg ttcaatctat ctctttcaag agagatttct tcttttcttc 300  
 ttcttcattc tgaaaagggg ttaagagacc gagggctctt tgttggtgaaa gaattctaaa 360  
 cacaaaggaa ggggtgtcct tgtgtgttta gaacttgtaa aaggaattta caagatagtg 420  
 gaactctcaa gcggtgtgct tggggactgg acgtangcac aagggtgtgg ctgaaccagt 480  
 ataaatctga gt 492

<210> 5059  
 <211> 446  
 <212> DNA  
 <213> Glycine max  
 <400> 5059

tcacaaaatt cttattcaat gcaattccag cctttgcatt taaaatactt gatctagaac 60  
 aataatttaa aaaaaagggt aacagaccaa tctaatacaa gaaaatgaat aatgtcaagt 120  
 tgtcaactta aaaaaggcaa ttgtgttcaa taactttaca gctgttaaca taatttatac 180  
 ctgttatcac caacaaagtc ggtggagacc acatcatctt cagtgttaacc aagaattccc 240  
 ttcaacttgc cctctgattc ctccctgaga aagacaacat tatataagac aatacaattg 300  
 agaaggacca atcccaaat ggaggccttt attaataaca agtaatgaaa atttgcttta 360  
 agaccaata atacacaaca tatatcatta gaggagaatc aaagaattct gtcattactt 420

gatagcattt ttaatttcac catatg

446

<210> 5060  
<211> 441  
<212> DNA  
<213> Glycine max

<400> 5060

taaacattca atttcgagcg tctcgatata ttacgggact catatcttac atccgagtaa 60  
aaatttattg tcgtttgaat tggctcagag gttcaacatt caattttgag cgtctcgata 120  
tattacggga ctcaataaga catccgagta aaaagttatt gtcgtttgaa ttagctcaga 180  
gctttaacat tcaatttcga gcgtctcgat atattacggg actcaatcag acatccgagt 240  
aaaaagatat tgtcttttga attggctcac aggttcaaca ttcaatttcg agcgtctcga 300  
tatattatgg gactcaatca gacatgagag taaaaagtta atgccggttg aattgggtca 360  
taagttcaac attgaatttc gagcgtctcg atatattacg ggactcaatc agacatccca 420  
gtaaaaagtt attgtccttt g 441

<210> 5061  
<211> 407  
<212> DNA  
<213> Glycine max

<400> 5061

agctttgagc aaattcaaac gacaataacc ttttactctg atgtctgatt gagtcccgta 60  
atatatcgag acgctcgaaa ttgaatgttg aagctcagag caaattcaaa cgaccataac 120  
ttttttctcg gatgtttgat tgagtcccgat aatatatcga gacgctggaa attgaatgtt 180  
taagctatga gcaaattcaa acgacaataa ctttttattc ggatgtctga ttgagtccag 240  
taatatatcg agacgctcga aattgaatgt tgaaactttg agcgattca aacgacaata 300  
actttgtact cggatgtctg attgaatgac gtaatatatc gagacgctct aaattgaatg 360  
ttgaacctct gagccaattc aaacgaccaa aactttttac tcggatg 407

<210> 5062  
<211> 521  
<212> DNA  
<213> Glycine max

<400> 5062

agctttgaat gcactattca atggagttga caagaacatc ttcagactga tcaacacttg 60  
cacagtggcc aaagatgcat gggagatcct gaaaatcact catgaaggaa cctccaaagt 120  
gaagatgtcc agattgcaac tcttggctac aaaattcgaa aatctgaaga tgaaggagga 180  
agagtgtatt catgacttcc acatgaacat tcttgaaatt gccaatgctt gcactgcctt 240  
gggagagagg ataacagatg aaaagctggt gagaaagatc ctcagatcct tgcctaagag 300  
atttgacatg aaagtcaactg caatagagga ggcccaagac atttgcaaca tgagagttga 360  
tgaactcatt ggttctcttc aaacctttga gctaggactc tcggataggg ctgaaaagaa 420  
gagcaagaat ctagctttcg tgtccaatga tgaaggagaa gaagatgagt ttgacctgga 480  
tactgatgaa agtctgacaa atgcagttgt gcttcttgga a 521

<210> 5063

<211> 619

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5063

tatctgtaaa atcttctagt cctccatata tgtgtgcttt ctctcctcat atgtattgct 60  
taaattaagg gatttatttt atgcattatg ctctatatta aaccttcttc aagattcatt 120  
tgcatttatc aatattcatt atgcttacta cctctggact gatataaaca accaaaaaaaa 180  
tgactgacgt aaatataaac aaatttaact acttttgccc tattataatg atatcatacc 240  
aaaaataccc ttcaattaaa agatatcata ttttcaatga ctcccttttta ttcttgattc 300  
aagttccaat gaaggagact ttatgaaaaa cattttttta aatgtgatta gtaggattaa 360  
attatgttaa ctaaatggtg tgaagttagt taatttttct tgtatttcag tcccgagga 420  
atattattta ctgtgtagca cgaattcctt tntaacccaa gggtgtcaat tttaagagag 480  
tatgtataag cgcaaccttt taggagctta ggcgatatcc ttgcggcaga tgttcaactt 540  
agcgggcact ttccagcana gtcaattctg cagaagctga atttctgtaa cttccgctta 600  
gtggctccac atatctcta 619

<210> 5064

<211> 528

<212> DNA  
<213> Glycine max

<400> 5064

gcaagctttg aatgctgtat ataatggagt tgactataat atcttcagac tgatcaacac 60  
atgcgcagtg gccaaagatg catgggagat cctgaagacc actcatgaag gaacctccaa 120  
agtgaccatg tccagattgc aactcttggc tacaaaattc gaaaatctga aaatgaagga 180  
ggaagaatgt attcatgact tccacatgaa cattcttgaa attgccaatg cttgcactgc 240  
cttgggagag agaatgacag atgaaaagct ggtgagaaag atcctcagat ccttgcctaa 300  
gagatttgac atgaaagtca ctgcaataga ggaggcccaa gacatttgca gcatgagagt 360  
aaatgaactc attggttccc ttcaaactt tgagctagga ctctcggata gggctgaaaa 420  
gaagagcaag aatttggctt tcgtgtccca tgatgaacga taagaatatg agtatgacct 480  
ggacactgat gaaagtctga ctaacgcagt ttggcttctt ggaaaaca 528

<210> 5065  
<211> 504  
<212> DNA  
<213> Glycine max

<400> 5065

agcttgtgcc tcttcacgtc tggaatatga atgtagcata tagatccaaa gacccttagg 60  
tgctttgctg atggcttccct cccgttccaa gcttcaattg gagtcttgct tttacagac 120  
ttagttggac atctgttgag tatgtaaaca gcagtgtaga ctgctttagc ccagaatgtg 180  
ttaggactt gagcatcgat ctagccatct ccataactgt gcgattcttt ctctcggaca 240  
ctccattttg ttgaggagga tatgcgactg taagttgtcg ctcaattcct tcacccctac 300  
aaaatctttc aaactcgcga gaggtgtact ctttgtcgcg atcacttctt agtactttta 360  
tccgttttcc actttgattt tcagcaaggg ccttgaactt tttgatactc caaatacttc 420  
tgatttttct tttagaaaat atacccatgt cattctagag aagtcacaa tgaagagtat 480  
gaagtacctg gttgttccat gtga 504

<210> 5066  
<211> 576  
<212> DNA  
<213> Glycine max

<400> 5066

tgaaccttga ggaagaaatt tcagtgtcac atgcatgtca ttgaaacgtt gatttggcac 60  
caaatgaccc tatgctttct ttagtgggag ggaagttcca tgcattgtggc attaagagct 120  
atgaccgtgg agttatttgt tggggattta tcatcaaacc aagttcacca tctcctaaag 180  
ggattaaggt ttttgaagtt gctgctgggtg attactttac ttgtgcagtt cttgctgaca 240  
aatctcttat gcctttatgt tgggggtgttg gctttccac ttctcttctt ttagctgttt 300  
caccaggaat gtgccaacct tctccatgtg ctctgggtc ctatgcaatt gataagcata 360  
agagtctttg caagtcaccg gattctctgtg tttgcatgaa gtgcagtggg gcttgtcttc 420  
ctgaaatgta tctgaagagt gcatgcaatt ttgcatatga tagaatgtgt gaatataact 480  
gttctcttg ttcttcatct gaatgcttct tgaactgtc ctcttcatat tccaatgctg 540  
ctgcttctac tgagaaaaaa agtgaaaaaa ttggggc 576

<210> 5067

<211> 559

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5067

tcaacatcag accacttcca ggggtgctgga actacttcac atggatttga tggggcctat 60  
gcaggttgaa agccttggag gaaagaggta tgctatgtt gtgttggatg atttctccag 120  
atttacctgn gtcaacttta tcagagagaa atcagaaacc tttgaagtat tcaaagagtt 180  
gagtetaaga cttcaaagag aaaaagactg tgtcatcaag agaatcagga gtgaccatgg 240  
cagagaattt gaaaacagca ggttcactga attctgcaca tctgaaggca tcatcatga 300  
gttctctgca gccattacac cacaacagaa tgggatagtt gagaggaaaa acaggacttt 360  
gcaagaggct gctagggtca tgcttcatgc caaagaactt ccctataatc tctgggctga 420  
agccatgaac acagcatgct acatccacaa cagagtcaca cttagaagag gactccaac 480  
cacactgtat gaaatctgga nagggaggaa gccaaactgtc aagcacttcc acatctttgg 540  
aagtccatgt tacatcttg 559

<210> 5068

<211> 247  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5068

tctataacctg ttgcaagagn ttgtggtcta cgttcttctg cagatcacca tacagatctc 60  
 tgtccttctt tgtagcaatc tggagtcaat gagaaacctg aagcttatgc tgtaaacatt 120  
 tataatagac ctcttcagca acanaactaa caacagcaga ataattatga cctttcaagc 180  
 aatagatgca atctaggttg gaggaatcat ccaaactga gatggacaag tntcccga 240  
 caacaac 247

<210> 5069  
 <211> 250  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5069

ccttcacccg acgaagacac tgacananac ttatcttctc cttcttggac aaagtatggc 60  
 aggctgnggg gcaagtaaat ttcttcccat cagaccttgg atgcaactat gatcgatac 120  
 ccatatcagc tacatcttga cnggtattca agccatcctt tgtcttgect ttgaatgtaa 180  
 ggaacgtccc aatgacacta tcacagacat tnttctccac atgcataaca tcaatacaat 240  
 gtctaacgtc 250

<210> 5070  
 <211> 377  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5070

tctataaatc tataaagttc tntcaaata tttataattt taaaatatat atccattaaa 60  
 atccanacct aaaaatctta atcctaaaag tcntttttaa aatctaataa gtcaaaatat 120  
 ttctacataa tcttttaata tctaaaagac tntttttata ctanaatagt cttttaaaat 180  
 cctatacccc ttttatattc cttcanagtt ttttaanatt cataaaattt taataaaaca 240  
 ttaaaataat attttanaat catatggaat acattatgat aaaataaata accatgatac 300

acgaaccatt acacagtaac atccacccat gagccaccta cctatgtgga catttttaaa 360  
tcattcaatt agttttt 377

<210> 5071  
<211> 236  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5071

caccatcaat aagtatacat cgttcataag ggtccaccac ttgaaagagg gctngcacca 60  
gcgtagaatt tccattctct gtctgtcta ctataccaat tgtcttttgt cctgcgaaga 120  
tacaagtaac atctttgagg accatangag cagcagggtc attctgtata tgaagggtat 180  
gaagttcaac tnttccctcc tttggccact ctggttcatt cctgcaatct tgaatg 236

<210> 5072  
<211> 395  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5072

actcggatgt ccgatgagtc tctgttatat atcgacacgc tcganatnga atgttgaagc 60  
tctaggccta ttcaaacaac aataacgtnt tactcggatg tccgattcag tgacgtaata 120  
tatcgggacg ctcganattg aatgttgaac ctctgagcca actcanacga caataactnn 180  
ttactcggat gtctgattga gtcccgtatt atatcgagac gctcgaaatt gaatgttgaa 240  
cctctgagcc aattcaaacy acaataactn tntactcgga tgtctgattg agaccataa 300  
tatatcgaga cgctcgaaat tgaatgtnga acctctcagc caattcaaac tacaantaac 360  
ttttactcgg atgtccgatc agtgacgaat atatc 395

<210> 5073  
<211> 240  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5073



tgtccgattc ggggacataa ctcatctaga cgctcgaaat tgaacaacgc aagctctcga 60  
gaaattcgaa tggtcataac atttcgcaca aatgtccaat tctgggacat aatatatcaa 120  
gacgctcgan actgaatagc ggaagctctc gggaaaatca gatggtcatn aactttcaca 180  
tggatgntcc gattgtgaaa ataatatatc gagatgctcc aaatcgaaca acgaaagcta 240

<210> 5074  
<211> 307  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5074

gcgatccttg agtcacctgc ngcatgcaag cttgtaatcg attacacata tactgtaate 60  
gattgccaga gcatattttc agaanaatatt ctcaacagtc acatcttttt atatggctct 120  
tgaatggcta tcaaaggcct atatatatgt gacttgagac acgaatttgc taagagtnt 180  
tcagaacaaa aaagtcttat cctcttataa agaaaaattg ttttatcctc ttacaaattc 240  
cttggccaaa ctacttgatga ttcaataagg aatttttgag tgctcaaact gttcaatcta 300  
tctcttt 307

<210> 5075  
<211> 265  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5075

caacttccgt ttgcccatcg gtttgtgggt gacaagtggg tgaanataac aatttagtgc 60  
ccaacttgct ccacatagtc ctccaaaaat ggcttatgaa ctagagtcc ctatcactaa 120  
caatgctcct tggcaaccat ggagtctcac aatctccttg aanaacaaat cagccacatg 180  
ggaagcatca tcaactttnt tacatggaat agaatgagcc catttagaaa acctatcaac 240  
aaccacaaaa atggaatctc tacca 265

<210> 5076  
<211> 251  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5076

caacacgaac aacaggtgag acaganaact tcatagctct aatgggatgg gcatcaactt 60  
ccttttcatt agtcaaagta gcattctttg gtatgaactg atccatacca accatagcaa 120  
cagtgttacc acaggggaca tcttccacag tttctgtct ttttcccatc cacatgacag 180  
ttctttgaac acttttaaca tacaaatcct tcttctcccc acggacataa tatgggtcca 240  
taatcctcac c 251

<210> 5077  
<211> 294  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5077

atccacgtcg attaccaatc cttngaaaca tagcacgaga cctatcagct atgcttcttt 60  
ctatagtaac atctgagtct gcatttagca tacgtggaag ggtgctcgat ccatttcgta 120  
gttctctatc acatgaaaag ccagaggccc ttatctgtac acaagaatgg ctcanagata 180  
caccttcacg caccatttta gacttcgatt tggaagagct tcaaagtctc gacaaacgta 240  
tattgttttc ccaatttgta gtaataatat aattaaaata tttattgagt aaca 294

<210> 5078  
<211> 309  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5078

aactcggatg tccaaatgaa acccgtatta tatcgagacg ctcgannatt gaaacagaag 60  
ctcgtagcaa atgcaaacca caataactnt ttactccgat attcgactga gtcccgaatt 120  
atatcaagac gctcgaaatn gagaacagaa gctctaagca aattcaaacg acaatacact 180  
ttaactcgga tgtccgaatg tgtgctatag tatatcgaga cgctcgtaat tgagaacaga 240  
agctcgtagc acattcaaac aacaacgtaa ttttacacgg atgtcctgtn gagtcgcat 300  
atatatcga 309

<210> 5079  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5079

acatgggaaa catntataat cttgaatatt ntataataaa atatattntg gtaggtctct 60  
 atctaaaaat atattatatt ttttttcaca aaccacgaat atctntccta aaagccagtg 120  
 gttaatgaat attgattcct atgactcana tctgatgtca ctgggttaaata taaaataatg 180  
 ttatgtcaat ggattcaagc actctatngg tntatataat atctttgtta tcatttcgga 240  
 aacatataat tatgaaatct ttatcatatt ctatcttaat atatctggta gataacattt 300  
 aattttctca caaacaggat atataaatct taatttctat tattt 345

<210> 5080  
 <211> 341  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5080

ccatgctaac atctgaatca tatcagcata tcacanaaac tgtttattca caatctgagt 60  
 cacatgttgt aagtggacat tctttaatgt attcatacta tacagtatcc atggcagcca 120  
 gaattcattc atgagaccaa ccctcttgtc tgtctgtngc agtccttctt ttgtcagtn 180  
 togcactttg ctaatcacia atgtctgtc tcaaaacaac taaattattt tattattgga 240  
 tcaataccta taagaaaaaa gagagcagtt attgttaaga ataggaacaa cataccaa 300  
 atatcagttt caactatact aaattcacia ctctctaaca t 341

<210> 5081  
 <211> 231  
 <212> DNA  
 <213> Glycine max

<400> 5081

ctcaatagct cttgcaacat ggtgagtcag tcccattggg ggctttggct gtatcatctg 60  
 tagaagcatg atccccagt aataaatatc agatttgatt ccagcatgct cgtttgctga 120  
 tactcagggt caatgtaaac agaaagtcca gcagttgatg tcatgcgata ctgtgtcact 180

gtgtctgcaa ctgtaggagg gacaagcctt gccaatccca catcactgat c

231

<210> 5082  
<211> 318  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5082

tctgacattc accacagatt ctgtcttctt ctatnttcag attgggaatg cctctaacag 60  
cacctctgtc aatgatattc ttcattgcctc ttaagtgcag atgtccaaat ctttgatgcc 120  
atattctgac ttcattcttct ttggaggata gacatgtgga ggagtaactg gtttcttgag 180  
gtgtccataa gtagcagatg tcctatgac tgctgccctt cattagaact tcaactcttct 240  
catttgctac caagcattct gacttttctg aagttacatt tgaatcctta tcacacagct 300  
gactgattgc tgatcaag 318

<210> 5083  
<211> 432  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5083

agcttgctta agaaacttct atgaagggtg gatctttaag cttcaatgag gtccttcaat 60  
ggatgatttc caccatggag atgcagcgga agataaagga gaagagggtga gaggaggcgc 120  
catctactat gatgcaagct ccattggagc ttgtaggcct aggatcttct tcatcaatgg 180  
attcctttgc ttcttggaag ataaatggca gcggaatgga gaaggaagag agagaggaga 240  
cgccacttca aggagaagat gagtctagaa gaagctcacc accataggag gccatggata 300  
agagcttgga ggaagaagga gatgaatgaa gggagaggga gagaagagca cgaaattntg 360  
tgctcaaaag gagctctgaa atctgaagtt aatattcaaa tgatncaaag tgaaaaaaat 420  
acacacacat ga 432

<210> 5084  
<211> 413  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5084

agcttagact aagtttatcc taccatcctc agactgatgg tcaaactgaa cgaactattc 60  
agtccttaga ggaccttttg agggcatgtg tcttagagaa aaaggggaatt tgggagagtt 120  
ttcttccatt gatagagttc actcataaca atagttttca ctctaccatt ggcatggctc 180  
cctatgaagc tttgtatggg aaaaggtgta tgacaccctt atgttgggta gagcccgag 240  
aagacctcac cttatgacct gaagtgggtat aacaaacct cgagaagggtc aagttgatcc 300  
aagaaaggat gaggactgct tanagtanac agaaaagtta tcagaataag aagaggaaag 360  
acctggaatt cgaggttggg gatcatgtat tcttgagagt cactccatgg act 413

<210> 5085  
<211> 475  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5085

ngctntaaga ctgtatattg atttcttttag tttgcacacc atgtgttctt ttcctttaac 60  
tgagaacccc attagttggg ccatataaat attctcctct aaatctccat ttagaaaggc 120  
agttttcaca tccatctgat gtagctccaa gtcataatgg gctactaatg ccatgataat 180  
cctgaaagaa tcctttcgtg agaccgggtga aaacgtctct ttataatcaa tgtcatcttt 240  
ctgagcaaat tccttagcaa cgagtctagc cttgtaacgt tcaagggttg catgagagtc 300  
acgcttagtc ttgaagacct acttacaacc aactctctta caatcctttg gtaattctac 360  
aaggttccaa acaccattat gttccatgga aattatctct tctttcatga cattaacca 420  
cttctcagaa ttatcacann atatagctng tgaaaacaaa acttgatcat tatca 475

<210> 5086  
<211> 411  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5086

gtcattaatc gtaatgaana ataacaatta aacaacaatt aataaaagag aagtcaagct 60

tattgaaaag ctagtaaata cttggaaaat atccatttgc aacatgttgg tataaaaaag 120  
 taacaacgat aataaaatta attaaggcgt acccaacaag ctttctcttg ctttgaaaag 180  
 tcattaatcg taatgaaaaa taacaattaa acaacaatta ataaaagaga agtcaagctt 240  
 attgaaaagc tagtaaatac ttggaaaata tccatttgc acatgttgg gtaaaaaagt 300  
 accaattatc tactaatga aacttatata taaaaaacat taataaatta atcaacatgc 360  
 acctttcaat aagcgataat aaattaatca nagegtataa ctagagacat g 411

<210> 5087  
 <211> 437  
 <212> DNA  
 <213> Glycine max

<400> 5087

tggaatgaa caacggaagc tctcgagaaa ttcatatggt cataacttat cacatggaag 60  
 tccgattaag ggcataata taccgagacg ctcgaaattg cacaacggaa gccctcaaga 120  
 aattcaaag gtcataactt atcacacgga agtccgataa aggcgcatag tatatcgaga 180  
 atcttgaaat tgaacaacgg aagctgtcga gaaattcaa ttgtcataac ttatcacacg 240  
 gaagtccgat tcaggcacat aatatatcga gacgctcgaa attgaacaac gaaagctctc 300  
 gagaaattca agtggtcata acttttcaca cggaagtccg attcaggcgc ataatatatc 360  
 gagacgctcg aaattgaaca acagatgctc tcgagaaatt caaatgatca taacttatca 420  
 cacgtaagtc cgatttct 437

<210> 5088  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<400> 5088

agcttgaaat tgaacaacag aagctcacga gaaactacaa tggtcataac atgtcacacg 60  
 gaagtccgat tcaggatcat aatatatcga gacgctcgaa atagaacatc ggaagctctc 120  
 gagaaattcc aatggtcata acttttcaca cggaagtccg attcaggcgc ataatatatc 180  
 gagaagctgg aaattgaaca acgaaagctc tcgagaaact caaatggatca taacttgtca 240  
 cacggacatc cgattcaggc gcataatata tcgagacgct cgaaattgaa caacgtatgg 300

tgctcgagaaa ttcaaattggc cataacttgt cacacggaag tccgattcat ggcgataata 360  
 tatcgagacg cttgaaattg aacaacggaa gctctcgaga aactcaaattg gttataactt 420  
 gtcaca 426

<210> 5089  
 <211> 382  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5089

agcttgagaa tggaggattt ccttgagggt cctctcttat gcaatcatgg aacacagctc 60  
 caaactcaaa aatggaggac acatgaatga caacgcaatt cattcatggg gctccgaaaa 120  
 agggtagaa tggaggattt gcttgagggt cttctcttan gcaatcatgg aacacagctc 180  
 caaactcaaa aatggaggac acatgaatga caacgcaatt cattcatggg gctccgaaaa 240  
 agggtgagaa tggaagattg ccttgagggt cctctcttat gtaatcatgg aacacagctc 300  
 caaactcgaa agtggaggac atatgaacag ccctcagcaa taacattcat gtggccctgg 360  
 aaaagaatga gaatggagga tt 382

<210> 5090  
 <211> 397  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5090

agctnggggc caattcaaac agccctaact ttgacattg agatgctaga aattgagaaa 60  
 tggaagttct tgagaaattc aattgggtcat aacttttcac tcggatgtca gattcaagag 120  
 caaaatatac agagacgctc gaaattgaac aacggatgct ctctagaaat ttaaatggta 180  
 aaattttttc acatggatgt tatattcaga cacataatat atcgagacgt tcgaaattca 240  
 agaattcaaa aattaaagt ctcaagaaat atagagatga aaaattatga ccatgggtgt 300  
 acgattgaga cccatgatat atcgatatgc tcaaaattca aaaattgggc caattcaaaa 360  
 attcaaagag ccctaacttt tgacatgggt gtacgat 397

<210> 5091

<211> 471  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5091

ntcgcaaggc ggggatgttc atgagcatat cagttcgttg tcgtgtagtc atgatctaca 60  
 taatgtcaga tcatattact ttgtatgtat gacaaaaatg aaaccaagat ttttggacct 120  
 ctcatttata gttatacaag gttgcatacc tccatgcttg ttccatcctt agctatctgt 180  
 tgtgatggag caaattcaac aatataatca gttacagata gaagccactc aatttctttt 240  
 ctccacctgg cctttctttc tgaggacatt ggctccagct ttgattgttc tccgaaaaca 300  
 gatgctgcat tgaatcagga aacaaattat tgaatggaaa tttcattgag acttgagaga 360  
 tcacatttca gttagtcaca gttataatat gcatgtgctt gaatntgaat tgagatgact 420  
 acactatcta ttaattntat agaaatcaag ccccatgatn gaaatcacac t 471

<210> 5092  
 <211> 464  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5092

taagctcctt caactgcaca aggctcttaa tatttgaaga gtatccttgt ggaaccttca 60  
 cccgatgaag aactgacaa aaacttatct tctccttctt tgacaaagta tggcaggctg 120  
 ggggcaagta aattttcttc ccatcaaacc ttggatgcaa ctgtgatctt atacccatat 180  
 cagctagatc ttgacgggta ttcaatccat ccttcgtctt gccttgaatg ttaaggagcg 240  
 tcccaatcac actgtcacia acatttttct ccacatgcat aacatcaata caatgtctaa 300  
 cgtcaagatc acaccagtac ggaagatcaa agaaaatgga cctcttcttc catatgcaac 360  
 tctgacnttt atccttcttt tgggtcttcc caaatacaat gttcaagtgt tgaacccgct 420  
 gatatacctg ctcaccanng aacgggttctg gcgtaatatc atgc 464

<210> 5093  
 <211> 429  
 <212> DNA  
 <213> Glycine max



<400> 5093

tctattggat gtgatgacaa taagtatatc actaattatt ttataaaaaat cgcggaag 60  
gattatagac tcacaaattht aatccgaatt gattatatat aattgagctt atttggttta 120  
agttttaact ttctttcttg ttcattatag aagattatta tatattttta agtcttttat 180  
ctatattcat tgcctttata tataaacttht taaatctata ttaatatagc ggcaaata 240  
ttttactcat taataatact caaatatatt ttatttaaca tctagtatta tttgtgctta 300  
tcagtgcata cacattacat gtctcattat ttttttaatc caaaatatga tagaattatt 360  
accgaactta tcagtgcata cactatacgt gtctctttat taaactaaaa ctagagcata 420  
ttaataaac 429

<210> 5094

<211> 316

<212> DNA

<213> Glycine max

<400> 5094

agcttgctta ttcaaatttc aagatacaag tgaactcccc aagaagtgc atggcccact 60  
tgtgggttttc caatctagct tacattctgc aaagtttagaa tatgaaaatc caattaaact 120  
caaggaggta cctttggggt accttaaacc aacattgggt gtgcccttaa agtacttaat 180  
aatccttttg acaacattta aatgggtattc cttgggattt tatttatatc tttcacatat 240  
gcacacactt agcatgatgt caagttggct tgtagtcaaa tatatgagat aaccaatcat 300  
acctctatac tttgac 316

<210> 5095

<211> 456

<212> DNA

<213> Glycine max

<400> 5095

aagaactatt actattgaag aattaattca tggtattttt tatgagacta actctattag 60  
gccaaagaag gatatacttg atgatattac agatacttta gaagatacgc atattcatga 120  
agaagtccac aaagacaaag aagatggaaa tagtagagac tctcaatcca aagaaaatca 180  
aataaacgtg gatcttccaa cggagtggag aacttcaagg tatcaccctc ttgataatat 240

cataggtgac atctcaaaag gggtaacaac tcgacacttt cttaaagatg catgcaataa 300  
catggctttt gtctctttta ttgaacctaa aaacataaat gaagccataa tcgatgaaca 360  
ttgaattatt gctatgcaag aagaattaaa tcaatttgaa agaaatcaag tatgggaatt 420  
agttgataga cccaatgatc atccaattat tggaac 456

<210> 5096  
<211> 423  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5096

ntctgcaggg aagctaagtg tgaagtatgc aatcctgcat atgattggcg ctgcaaactg 60  
ggtagccacc aatcatactt ccactgttgc cacaggtttg ggtaaatttc tgtatgctgt 120  
tggaaccaag tccaaattta attttggaaa ctatatTTTT gaccaaactg ttaagcattc 180  
agaatctttt gctgtcaaat taccatttgc cttcccaact gtattgtgtg gcattatgtt 240  
gagtcaacat cccaatattt taaacaacat tgactctgtg atgaagagag aatcggctct 300  
gtccctgcat tacaaactgt ttgagggggac acatgtccca gacattgtct cgacatcagg 360  
gaaagctgct gcttcaggtg ctgtgtccaa ggatgctttg atngctgaac tcaaggacac 420  
atg 423

<210> 5097  
<211> 442  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5097

agcttattct ttatctagag tagttgagca caacaactta ctactgacat atattcgact 60  
ttagtagtgg acaatgtagt tgagccttgc atcttgcata ttcattgttac taagttagca 120  
ccgataaagt aatagcttcc actagtgtt tttctttcaa ctttatcacc aacatagtca 180  
acatcataat agcttgtaag tctgaaactt tctcttcttt tgaacataag accaagatta 240  
gaagttccaa ttaaatactt acaaataatgt ttaatttttag ttaggtgaac ttccctttgt 300  
tctttttgaa atcttgcaca tagataaaca ttgaacataa tatcagaaat ggatgcagtg 360

agatagacca gtgagttgca tccactttnn ttgatccttg tccaatccaa ggtatgtcat 420  
ggtgtgcatn ggagtcttca tt 442

<210> 5098  
<211> 467  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5098

tcttattcac ataacaccaa tagtattcca tttataagca gagattgacg attcanatta 60  
catatttata agagaccaac caaacacaaa gcaaccacag cttataacac ccgtaacaaa 120  
tcctagaaca tttgaatttg caaaggcggg ccatgaccac tttattctaa aacttcaaac 180  
acaacacata cttattatatt attgatacat gtattacagc tatctctgct tgaagggttat 240  
gcatgttgat ctcaattgca gctgcatggg tcgcaagtgc agtttgatcc acagttgcag 300  
ccaccgttct cagctgcaac acccatttca gcaccctcga attgggcctt caccggccca 360  
acacccaaaa ctagagtctc atttgtgatc ttctcaacgt agtcaaaaaga gtacttggtg 420  
caactgcaat acatganaaa ttaacatata taaggttggg gaaaaca 467

<210> 5099  
<211> 351  
<212> DNA  
<213> Glycine max  
  
<400> 5099

tcctttactt gtactcattt ttattgcgtg cggttgtaat ccaactgccg ggcattgttca 60  
gaacaaccag ttgaatccag tatggaatga gcactttgaa ttcattattg aagatgcgtc 120  
aacgcagcac ttgacagtaa gaattttcga tgatgaaggc gttcacgctt ctgaacttat 180  
tggtgtgcc caagcttct tgaaggatct tgaacctggt aaagtcaagg acgtatggct 240  
taagctggtt aaggatttgg aggtccatag agataacaaa tacaggggtg aggtaagata 300  
gtatgttctt agtgtcttcg caactttcat ctagcattct agctgatcaa t 351

<210> 5100  
<211> 416  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5100

agcttnttag ttttagtaga tgaagatgaa tctgtggcca cctcatggac tcctctaagg 60  
ataatagcat catttcttgc actgaattgt tgggagttgg aagccatctt ctcaatcaaa 120  
ttcctagctt cagcaggggt catatcacca agagctccac cattggcagc atcaatcata 180  
ttcctatcca tgttgtaaag tccctcatag aaatattgaa gaaggagttg ctcagaaatc 240  
tggtgggttag gatagcttgc acacaatttc ttgaatcttt cctagtactc atacaagctt 300  
tctccactaa gttgcctgat gcttgaatg tcttttctga tggcagtggc cctagatgca 360  
gggaagattt tcttcaagaa caccctctta atgtcatccc agctgaaaac ggacct 416

<210> 5101  
<211> 398  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5101

agcttcacag aggagataga gttaggggtcc ttnggagcgg tttatagagg cacaattggt 60  
gacactaaca caagtatcgc cgtcaagaga ttatagacaa ttgctgatga aggggagagg 120  
gaatctcgaa ctgaaattac tgccattgct cgaacacatc ataagaattt ggtgaagctc 180  
attgggtttt gcatcaatgg agctaggaag cttcttggtt atgaatatgt cagcaacggg 240  
tctcttgcaa gtcttctctt caatgatgag aagcacatgt cttggagaga cagactaaaa 300  
atcgcttgg atgtcgctag aagagtccta tatctacatg aagagtgtga gggccgtatt 360  
attcattgca gataaatcct ctaaataatc ttatggat 398

<210> 5102  
<211> 419  
<212> DNA  
<213> Glycine max

<400> 5102

agcttgggga gctaggaaga ctctctgcat tattgaagaa gttagagaaa gatctcaaga 60  
acaagaataa atacgatgta tgttatccat tcttgtggat aaattcttca aactttctgt 120  
tatgggtttc tttggactgt gattgcctta cttttgtatg tgtattggtt acctatatat 180

ggctgcagga tgagcaatac cgtgccaaac taaacaagtc aaatgagagg actctatcac 240  
 ttatcaaagc aggaattgat actgtggttag cagtaggact gcttcaattg gcacccaaga 300  
 cagttactcc tcgcgtaact ggggcttttg gatttgtttc gtctctaata tcttgctatc 360  
 aggtacctgc tagtataatt gtagtttaat tccgttgtgc ttctattttc ctatcctat 419

<210> 5103  
 <211> 437  
 <212> DNA  
 <213> Glycine max

<400> 5103

agtcgctcca acaatttata tacttaactc ctacctcctt agccaatctt aggtgggcta 60  
 agaggggttc atactcaact ttattattcg tcactcctc ctcgaacctt agggattgct 120  
 ctaggattac ttcacctatg ctttctagga tgactccagc cctactcctt tttttcattg 180  
 gatgaaccat ctacgtatag cttccacctc tcagattatg gttctgtagt ggttgtcatt 240  
 ttggctatga agtttgctag gcactacgcc ttcattggac ctattggctc atatttaagc 300  
 ctaaacttgg acaacttgat cgatcaggct atcattcgac tcgtgagttc tggtttcttc 360  
 ataactgttc agataggggtg gtcagttcaa accacaatct aatgactttg gtaggaagta 420  
 tgggtctagt ctctac 437

<210> 5104  
 <211> 357  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5104

agctnttcca tctatctata tgtgagtcga taaggagttt cattgggtgc tatctggagt 60  
 gtacagtggg acgcccaggg tatgttgtag agttcttctt tccataggcc cttagactta 120  
 tcgagtctag tacgcagggc cctgaggatg actctgttag ctgcctctgc ttagctgtta 180  
 gtatgaggat gttcgacaga ggtgactagg tccttgatgc ctagccttgt taggaagtct 240  
 tcataagtgt gagctctgaa ttgaggttgt tgtcgggtgac aatgggtgat gtgaggtcgt 300  
 acctgcatat gagggggttc taggtgacta tttccacctc gttgggtggg aatttac 357

<210> 5105  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<400> 5105

agcttgagct aaaagggttc tccacataat tttattaata agaggctcag ttctacccac 60  
 tggccttttc tccattaact cctttgtagg cctttctgta gctagtgccat atgctcctag 120  
 agtatccata atgagattta cccataatag ttgaactgtt gttaggggaa cgtctcccga 180  
 agaaactgct gcaataaaat tgatcactag tgctgcaaca ttcacgggta gttgaaactg 240  
 gatgaatttc tggatgttgt tatagacaca tctccccac cttagacag tggcaacaga 300  
 attgaagttg tcatctaaga tcacaatgtc agaactctcc ttggcaactt cagttccttg 360  
 gatccccata gagagtccaa tatcagcttc tttt 394

<210> 5106  
 <211> 428  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5106

tctcgagaaa ttcgaatggt tataactntt cccacaaatg tccgattcgg ggacataact 60  
 catctagacg ctcgaaattg aacaacgcaa gctctcgaga aattcgaatg gtcataacat 120  
 ttgcacaaa tgtccaattc tgggacataa tatatcaaga cgctcgaaat tgaatagcgg 180  
 aagctctcgg gaaattcaaa tggtcataac ttttcacatg gatgtccgat ttgggaaaat 240  
 aatataatga gatgtccaa attgaacaac gaaagctatc gagaaattcg aatgggtccga 300  
 acttttcgca cggatgtccg attcggggac ataactcatc tagacgcacg aaattgaaca 360  
 atggaagctc tcgagaaatt tgaatagtca taagatttca cacggatgtt cgatttgggg 420  
 aaatatat 428

<210> 5107  
 <211> 492  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 5107

tattacggac acttgaatct cagcttcaag acaactctcc ttgttggtgt ctacctcaac 60  
ctctatttca tatattggct tgcctagtag agttgctact gttaataata actcttggtg 120  
ggtttccaat tctgttggtt cttcttctag tactcctagc ctttggcatt ctagattagg 180  
tcaccctaataa ggatcatgtaa tgaaactagt cttcaatcat tgtaacattt ctccatcaaa 240  
taaaaatttc tcagggtttt gttcttctag ttgtatggga aagtctcata gattaccatc 300  
tcacactttt gtttttggtt actctcttct ggagcttatt ttcacatatt tgtgggggacc 360  
ttctcatttg acttcatatg ctgggtataa atattatgta tcctttattg atgntttnt 420  
ccaagtacac ctggatattt cttatcaagt ctaanggtga aactctnntg ttttcaagct 480  
tntaaatcta tg 492

<210> 5108

<211> 473

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5108

tcttatccag gcaattctng gtggtgaagc tccttcttcc ttggcttatt ccctagtggg 60  
tggtgcctcc cctatcctct tctcctttgc cttccgctgc atctccatgg tgaaaaatca 120  
ccattgaagg acctcattga agctcaaaga tccagcctcc atagaagctc cacaagcaag 180  
cttccatcat gaatgaagtg atttctaata ttagtgtggt tagtcctctc atgatggact 240  
tgatccttgg caaaacaaaa tgcattttaga cagtggcaaa aaatgatatg cctctttttg 300  
tggaaccaca agattgctaa ttagaccctt cagccaagtt cattccttta ctggttcttc 360  
caacgccatg tactctacct gtgtaatgga taaagccacc atggggtgaa gtgtagtctt 420  
ccaactgagt agagtgttgc ttccatgtnc ttcattctca attactactt agt 473

<210> 5109

<211> 133

<212> DNA

<213> Glycine max

<400> 5109

tattgcaaga gaatgaattt agcacctgat caatgaatta tacaagcaac ttctcaccac 60

gatcacgctc cccggatagg gaggctgtct ccatggcatc tttgtaaggt aatccttctt 120  
tgacaaacaa tat 133

<210> 5110  
<211> 432  
<212> DNA  
<213> Glycine max  
  
<400> 5110

agcttcttag tctcagctga tgaagatgaa ttcattggcta cttcatgcac tcttctaata 60  
acaatagcat catttctggc actaaattgc tgggagttgg aagccatctt ctcaattaaa 120  
tttctggctt cagcaggggt catgtctcta agggctccac cactgacagc atctatcata 180  
cttctctcca tgttaccgag tccttcataa aaatattgga gaagaagctg ctcagaaatc 240  
tagtggtgag ggcaactggc acatagtttt ttaaattctt cccagtattc atataggctc 300  
tctccactga gttgcctaata gcttgaataa tcctttctga tgggttgat cctggaagca 360  
aggaaatttt tttctaagaa tactctcttg aggtcatccc agctcgtgat ggaccttgga 420  
gcatggaat at 432

<210> 5111  
<211> 161  
<212> DNA  
<213> Glycine max  
  
<400> 5111

agcgttgagc cattgaattt ctcgagagct ttcgttggtc aattttgagg gtctcgatat 60  
attatgcgcc tgaatctgac ctccgcgcga aaagatatga ccatttgatt ttcattgaaag 120  
ctaccgctgc tcaatatcta gcgtcttgat atattatgcg c 161

<210> 5112  
<211> 412  
<212> DNA  
<213> Glycine max  
  
<400> 5112

agcttggtgca tccaataccc tgatgaggat gtcccatatg ttcttaaaac tggactaatc 60  
catttgcttc cagagtttca tggccttgca ggtgaagacc cacacaaaca tctgaaagaa 120



ttccatattg tttgctccac catgaaaccc ccagatgtcc aggaggatca catatTTTTg 180  
aaggcctttc ctcattcttt agagggagtg gcaaaggact ggctatatta ccttactcca 240  
tggtccatca cgagctggga tgacctcaag agagtattct tagaaaaaaa tttccctgct 300  
tccaggacca cgaccatcag aaaggatatt tcaggtatta tacaattcaa tggagagagc 360  
ctatatgaat actgggagag atttaaaaag ttatgtgtca tttgcccgca cc 412

<210> 5113  
<211> 415  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5113

tcaagaatta tggcctcatc aaactacttg tttcccgagg gaaattctat aaatagacct 60  
cccatcttta atggagtggg ttaccactac tggaaaaccc gcatgcaaat ctttatagag 120  
gcaatagatt taaatatTTg ggaagccata gaacaaggac cttatgttcc ctctatagtg 180  
gccggaagtg caacaataga aaaacctaga gcagattgga ctgaggaaga aagaagatta 240  
gtacaatata atttaaaggc caaaaatatt attacatctg ccctaggaat agatgaatac 300  
tttagggTTt caaattgtaa aagtgtctag gatatgtggg atacactaca agtaacacat 360  
gaaggcacia canatgttaa aagatctagg ataaacactt taactcgtga atatg 415

<210> 5114  
<211> 271  
<212> DNA  
<213> Glycine max

<400> 5114

agcttaagct cttcaactg cacaaggctc ttaatatttg aagagtatcc ttgtggaacc 60  
ttcacccgat gaagacactg acaaaaaatt atcttctact tcttggacaa agtatggcag 120  
gctgggggca agtaaatTTt cttcccatca gaccttggat gcaattgtga tcgtataccc 180  
atatcagcta gatcttgaca ggtattcaag ccacccctcg tcttgccttg aatgttaagg 240  
agcgtcccaa tcacactttc acaaacattt t 271

<210> 5115

<211> 386  
 <212> DNA  
 <213> Glycine max

<400> 5115

agcttcaaga ataatgggtct catcaaactt cttattccta gaaggaaatt caattaatag 60  
 gcctcctatt tttaatggag aggattacca ttattggaaa acccgaatgc aaatcttcat 120  
 tgaggcaata gacttaaaca tttgggaagc catagaagta gggccttatg taccactat 180  
 ggtggctgga aatgcaacaa tagaaaaacc tatagaagag tggactgaag atgaaagaag 240  
 attagtgcag tacaatttaa aggctaaaaa catcattact tttgccctag gaatagatga 300  
 atattttagg gtttcaaatt gtaggaatgc taaggatatg tgggacactc tacaagttac 360  
 acatgaaagc acaactgatg ttaaac 386

<210> 5116  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<400> 5116

agctttcttat ccaaagctca tcttgggtgt gaagctcctt cttccatggc ttattcctta 60  
 atggatggcg cctcctctca cctcctttcc tttgtcttcc gctgcatctc tatggtggaa 120  
 aatcaccatt aaaggacccc attgaagctc aaagatccaa cctccataga agctccacaa 180  
 gcaagcttcc atcatagggt gacgaaagtg gtcttttcca catcttcggg tgccattttt 240  
 atttggttat accctgagaa accatccata aatgagaaaa gggcgaactt agctgtatta 300  
 tctactagta tatcaatgtg tggttaaggga aaattgtctt taggactggc tcggtttaa 360  
 tcccgatagt caacgcacat ttgcactttg ccatcttttt ttgggacagg gacaatgttg 420  
 gctacccact cgggt 436

<210> 5117  
 <211> 428  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5117

tcttaacatt caaggcaaga caaagatgg tttgaatact catcgagatc tagctgggat 60

gggtatacga gaccagttac atccaaggtc tgatggtaag aaaatatact tgcctctagc 120  
 ttgtcatact ttgtctagaa aggagaagat aagtttgtgt cattgttttt gccatgtcaa 180  
 agtgtctcgg ggattctctg gaagcaatgt cttccaaggc tattttgatg atgtcaaaga 240  
 atcaagagtt aagcaaagtt tcaagcaaag attcaagaat caagtttcaa gattcaagac 300  
 tcaagaatca agtttcaaga atcaagattc aagaataatc aagatcaaga ttcaagactc 360  
 aagattcaag aatcaagaag aagactcaat caagataagt attaaanagt ttttgaaaac 420  
 attgagta 428

<210> 5118  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<400> 5118  
 agcttttcca tctagctata tgtgagtcga taaggagttt cattggttgc tatctggagt 60  
 gtacagtggc acgcccaggc tatgtttag agttcttctt tccataggcc cttagactta 120  
 tcgagtctag tacgcagggc cctgaggatg actctgttag ctgcctctgc ttagctgtta 180  
 gtatgaggat gttcgacaga ggtgactagg tccttgatgc ctacgcttgc taggaagtct 240  
 tcataagtgt gagctttgaa ttgaggttgt tgcgggtgac aatgggtgat gtgaggtcgt 300  
 acctgcatat gaggggtttc taggtgacta tttccacctc gatggctgta attttacgaa 360  
 gtgatcttgc ttttatccac ttggtaaagt agtcgatggc tactagtaag tatttgacag 420  
 ctcttgcgga ttatggca 438

<210> 5119  
 <211> 372  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5119

agcttaactc tcaaattccn cttcatccca tgctcttttg atataggcat tccttcatta 60  
 gggacaacaa cctcagcacc aggtttgaca atatctgtca atgggatcat gagactcctt 120  
 ccgtccaagg tgggtgagatc caacgtttta ccagtaaggg cctcaagaag gggttatctct 180

tggttgatca ccaaatacatt accatccctt ctataaagag catgcggtt ctcatctatc 240  
 acaaaaatga gatctgctgg gatgacacca ggctcacggt tacctttctc tgggaaggta 300  
 atttttgttc ctttcttcca gccaggtttt atctcgatag tcaaaatctc ctccacatcc 360  
 ccacatttgc tg 372

<210> 5120  
 <211> 464  
 <212> DNA  
 <213> Glycine max

<400> 5120

tagtaaagct aagcactaac aatctcctct cttggcagaa tttgtctaaa acatacttag 60  
 acatttctg agcaggtagc agcagttatg caagtgggat cagcaacttc cattatcaga 120  
 gtaatcaagc acagcgaat ctgtagtcta gacaagttgc aagtcgtttc caggatgtca 180  
 agacatctca catgacatct gctttctgct tctgtctccc ctgtctccat gcttactgca 240  
 gcatcttcta tcagctacta gtcttttcca ggatgtcaag acatctcatg tgacatcagc 300  
 tttctgctcc cctgtcttc atgctcttac tagtagctta catcagtcatt cattggcagc 360  
 agtctcccc tcaaagtcatt atacatacaa ctccccctca aaatcatgaa tcatgcatac 420  
 atcgtatcct actgccatac atcatacata gtatcctact actc 464

<210> 5121  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5121

agctngatcc ctcaaaaaag gataacgtta atgaaaatag tgaaaacaaa ataattaaag 60  
 agatagttta ctttgatgtg gttttttag tagtcccttca ccacaggatt tgtaaaaaag 120  
 tcatcctcag aatttatgga ctgtccctga ctcttgccc attccacata ctgtttcttt 180  
 ccacccatgt tctcatagtt attcaccaaa ctcaacacca tcttgatccc atattttctt 240  
 gcttcggcta ttgcgaaatc caagcccttt ttatttccaa tccaagaaaa caacagagtt 300  
 aacaaatggg aaatgaagtt ttgttctata cactattaga aaaaatacaa ttagatagaa 360  
 aaaaaaagta attttccgtc actaaatttg atcattaatc cattgggatg aaaatg 416

<210> 5122  
 <211> 451  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5122

nntgcttnca ttgtagccac ttaacctcag gacttattga gggatgatgaa ttaagaagaa 60  
 attctgatgt gatggagatt cttagaaga caaggtttct acgtgtacat gatgctgaca 120  
 atgagaagtc tcccagagaca atcctcgagc atgagtatga atttacttgc atacatctta 180  
 gtataactaa tactcttaac atgtttatgt aatttgaggc cctccttgca ttttcctgtt 240  
 ttgcattaca tgttctaatt ttggatccat ttattttagt cgaattatat ggcttggaga 300  
 cttgaattat cggattgccc tctcctaccg ttttgctaag gcacttggtg agatgcaaaa 360  
 ctggagagca ttgttggaga atgaccatgt acgcctatat aactctgttc ttttaatatc 420  
 taattttcta tcttttaact tcaactggat t 451

<210> 5123  
 <211> 426  
 <212> DNA  
 <213> Glycine max  
  
 <400> 5123

agcttatggt gcaaaccatct acaatagacc tcttcaacct cagcagcaaa atcaaccaca 60  
 acagaacaat tatgacctct ccagcaacag gtacaatccc gggatggagga atcatcccaa 120  
 ccttagatgg tcgaatcctt cacaacagca gcaacaacaa aaacagcctt attttcagaa 180  
 tgctgctggc ccaagcaaac catacgttcc tccaccaatc cagcagcaac aacaacaaca 240  
 acaatagccc cggaaacatc aaacagttga ggcccctccg caaccttccc ttgaagaact 300  
 tgtgaggcaa atggctatgc aaaacatgca gtttcaacaa gagaccagag cctccattca 360  
 gagcttaact aatcagatgg gacaattggc tacacagtta aatcaacaac agtcccagaa 420  
 ttctga 426

<210> 5124  
 <211> 343  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5124

agcttatacg acctatgatg tgggtntgtg actaaattca atttagacac aagtctttca 60  
cttgccatat tgggtacaact ccttccatca atgacaccca tgcaaaacttt gccattgatc 120  
aaacatctag tgtggaaaat gttttctctt tgactttcct ccatagattt caattgatgg 180  
ccaagtaacc gcctaatacat caacaattct ccttccgggtg ttttctccac ttcctcctca 240  
tcatectcac tctcttctcc cttttcaact tcggactcac taatgtaatc tccatctcta 300  
agaatcatgg ctntcttggt agggaactca tatagcataa tgt 343

<210> 5125

<211> 348

<212> DNA

<213> Glycine max

<400> 5125

tgacgatccc tgtttatata tcaaaagcaa acatattggt gacaaaaatc actacataaa 60  
aaagataaat cataaaaaat gcgaataaat aataatctaa aagatttaaa ccagataaag 120  
aaactaccac cttctataaa atccaacaaa agtaagtcgg ttatcaatat aaagattttt 180  
atatcaacta ataataaatc cttctagata taatccacct gttgttaggg tcaatctcaa 240  
gcgctttctt aatatcaa atcgcccaagt ctaaatcagc caactggata tatgcctggg 300  
cccttctata gagagccttc acattagtac tctcaaggtc cagtacct 348

<210> 5126

<211> 430

<212> DNA

<213> Glycine max

<400> 5126

ttaagtcacc tgcggcatgc aagcttccag attagtgtac caaatgaccg ctgctccagc 60  
caagctatct tggaaaaagt gcattaacaa cttttcatcc ctagaatgca ccccatctt 120  
gcgacaatac atcttgagat gggtcttagg acaagtcgtc cctttgtact tgtcgaaatc 180  
aagtaccttg aattttgggg ggatgacgac gtctggtact aagcaaagat tcgccatgtc 240  
cgcgaaacgga taatcaccaa agccttcaac agctctcaat ctctctttga tgagatcgag 300

tttcttctt tcttccgttg cgggggatgg tcttctatg gacaagaata ttggctgtgc 360  
 tgggaggttg ggctgaggca gtatgttggg tgccggcccc tcgatgggga ccagggggta 420  
 gaaatcgatg 430

<210> 5127  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<400> 5127

tataacttcat cactagattg ctgatgtgca tttccagcac tgtcgtgcg tggaagttca 60  
 tctcttaciaa aactgctca gaagcataag ccagggttg gatacagaag cgcaaact 120  
 gctatcttgg actgaggcaa ccttttaaag atctcacata ggcatcattc tggcaaagac 180  
 tcaatagatg tcttatgctt ctgctcaaac cattctccac tgatatcaaa tggaactctg 240  
 aagcgagacc tcttctgaag aggaaggata acatgaactt gactgtcaag agacaagatg 300  
 agacacggct ccttcgggtt aggataaata ggaccacat gactacaatc atcattttct 360  
 gacaaaccaa acatgtctaa agtcaagatg gcgacaaaac tgcacataaa taaata 416

<210> 5128  
 <211> 435  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5128

ntggagtttc caagtgccaa ttcgtcttct tctttagtcc agtcttcttc tggcttcaat 60  
 tcatcagtgg gctttccttc tgtgtccagc atcttgggat gttcccagcc tttgatgaca 120  
 gctttccagg ttctgctatc cagtgatatt aggaaggcca ccattcttgc tttccagtat 180  
 tcatagttgg ttccatcaag aattggtggt ctgttccactg gtctctcttc tttctccatg 240  
 ttcacagaa tttatctccc tagatctcac tctgtgattt cgagtgttgg ctctgatacc 300  
 aattgaaatt ctgataccag gggacagatg tcgtaccgga tgtcacgaca tcacgcttca 360  
 gaacatgcag attagatgcg tccgtatgaa cagattaaac aagtnaataa cacaagagga 420  
 ttgttaaccc agttc 435

<210> 5129  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<400> 5129

agctagaact cttgcacctc cttgaagatc aactcatgac ttctcccaaa ctttggtgctgc 60  
 ataaaccttc tttggccac catctttggc ctccaaagtg atggtgtaca atgaaccaga 120  
 aaccacttgc tgtttcgcag ttaccacctt ttcaaactcc aaaagggcat tctgcatagc 180  
 catttacaat tcaataaaaa taaaatatat ttcatatata ccacagaata aaaagataat 240  
 agaagcccg tctgtggttat tgaaattgac cctaccaatc tattttattcc ttgacagtaa 300  
 tggaaatgca aatttatcct aacaatcaat taatttttgg tgaacaaaat tttgggggag 360  
 ggggtgatgcc ccagaacaag acagataaag cctccgagct caaagaacat tcacagaaga 420  
 acttacattt accccact 438

<210> 5130  
 <211> 459  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5130

ctatctacta ctcaagctta tgctgcaaca tctgcatgn acctgctaaa cctcagcaac 60  
 aaaatcagcc accacagaac aattatgacc tctgcagcaa caggtacaat cccgggtgaa 120  
 ggaaccatcc caaccttaga tgggtcgaatc cttcacaaca gcagcaacaa caacaacagc 180  
 cttattttca taatgctgct ggcccaagca gaccatacgt tctccacca atccagcagc 240  
 aacaacaaca acaacaacaa cccccaaaac agcaaacagt tgaggctcct ccgcaacctt 300  
 cccttgaaga acttgtgagg aaaatgacta tgcaaaacat gcagtttcaa caagagacca 360  
 aagcctccat tcagagctta actaatcaga tgggacaatt tgctacacaa ttaaatcaac 420  
 aacagtccca aaattctgac agattacett ctcaatctg 459

<210> 5131  
 <211> 426  
 <212> DNA  
 <213> Glycine max



<223> unsure at all n locations  
<400> 5131

taagctcctt cgactgcaca agactcttaa tatttgaaga gtatccttgt ggaaccttca 60  
cccgacgaag aactgacaa aaacttatct tctccttttt ggacaaagta tggcaagttg 120  
ggggcaagta aattttcttc ccatcatacc ttggatgcaa ctgtgatcgt atccccatat 180  
cagctagatc ttgacgggta ttcaagtcac ccttcctctt gccttgaatg ttaaggagca 240  
tcccaatcac actgtcacia acatttttct ccacatgcat aacatcaata caatgtctaa 300  
cgtctagatt agaccagtat ggaagatcaa agaanatgga cctctgcttc catatgcaac 360  
tcttactttt atccttcttt tgggtctttc caaatacagt attcaggtgt tgaacccgct 420  
gatata 426

<210> 5132  
<211> 413  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5132

tcttagtttc agatgatgca gatgggntg tagctacctc atgcactcct ctaatgacta 60  
tggcatcatt tctggcgcta aactgctggg agttggagge catcttctca attaaatttc 120  
tggcttcaac acgagtcatg tctccaaagg ctccaccact ggcagcatct atcatacctt 180  
tctccatatt actgagtcct tcataaaaaat attggagaaa aagttgttct gaaatctgat 240  
gggtgggggca actggcacat aattttcttaa atctctcaca gtactcatac aggctctctc 300  
cactgagttg tctaatacct gagatatact tctgatggc tatggctctg gaagcatgga 360  
anattntttc taagaatact ctcttaacgt catcccagct cgtgatggac ctt 413

<210> 5133  
<211> 429  
<212> DNA  
<213> Glycine max

<400> 5133

ctgttttcaa tcttgtgcat ctgatatat tacaggtctc aatcagacat ccgagtaaaa 60  
agttattgtt gttagaagtt gcacagagct tcagttttgc attttgaggg tctcgatata 120

ttacgggact caatcggaca tetaagttaa aagttattgc tgtttgcatt tgcttcgagc 180  
 ttccattttc aattacgagc gtctcgatat attacaggac tcaatcggac atccgagtaa 240  
 aaagttattg tcgttagaat ttgctcatag cctctatttt caattttgag tgtgtcgata 300  
 tattacggga ctccgctgta catccgagta aaaagtaatt gtcgtagaa ttttctcaaa 360  
 gcttctgttt tcaatttcga ggcgtctgat atattacagg actcaatcgg acctctgact 420  
 caaaagtta 429

<210> 5134  
 <211> 440  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5134

cggttacctc cttcttcaact acatcaagaa ttactgggtt gcgtcttctc tgtgggtgtc 60  
 ttactcgttt agccccatcc tctaaattta tccgatgcct acatgtggat gggctaatac 120  
 caggaatgtc tgccagggtc cagcctatag cttcttatg cttcttaaga actgataaca 180  
 gcttctcctc ttgctcatca acaaggaggagg caaatataat tactggaaaa cttttgctct 240  
 catctaagta agcatatttt aaatttgatg gcagaggctt caattctggt gtgggcggct 300  
 ggatagtggg agaaagagat ggtttctcag cctgtacctc ataaagaaag tcagaggtag 360  
 gtgtacttcc tgaaacatgg ttagttctat ctgactntat aaaatcaatc tcaagaggta 420  
 aaacatcaga catgtgatca 440

<210> 5135  
 <211> 422  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5135

tcaacattca atatcgagcg tttcgatatg ttacgggact gaatcagaca tccgagtaaa 60  
 acgttactgt agtttgaagg tgctcagagc taaggcattc aagtcagagc gtctcgatat 120  
 actacgagac tcaatcagac atccgagtaa aaagctattg tcgtttgaat ttgctcaaag 180  
 cttcgggtatt caatttcgag cctctcgata tattacagga ctccatcaga caccgagta 240

aaaaagttat tgtcgtttga atctgcttgg agcttcaaca ttcaatttcg agcgttccga 300  
tattttacag gactcaatcg gatagccgag caaaaagtta ttgtcgtttg aatttgctca 360  
gagctttngt attcaatttc cagcatttgg atatattacg ggtctcaatc agacattcga 420  
tt 422

<210> 5136  
<211> 349  
<212> DNA  
<213> Glycine max

<400> 5136

agcttgccgc cacagagttt tccgactatg ctcttgtgtg gtggaacaag ctacaaaagg 60  
agagagcaag aaatgaagag ccaatgggtg atacatggac ggagatgaaa aatatcatga 120  
ggaagcggta tgtgccggct agttactcaa gggacttgaa attcaagctc caaaaactaa 180  
cccaaggcaa caaggggggtt gaggagtatt tcaaggaaat ggatgtgctc atgattcaag 240  
caaattattga agaagatgag gaggtaacta tggctcgatt tcttaatggt ttgactaatg 300  
atatccgtga tattgttgag ctgcaagagt ttgttgaaat ggattattt 349

<210> 5137  
<211> 417  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5137

agcttcatac ttgcaacana ggagttgagc ttgtaaaaaa gattcgtctt caaactctta 60  
gaggtgactn tgagcatttg tttatggagg agtccgagtc aatttctgat tatttttctc 120  
gagtattggc cgtagtcaat caacttaaaa gaactgggtga agatgttgat gaggtgaagg 180  
tcatgaaaaa aatacttcga actttaaatc caagttttga cttcattggt accaacattg 240  
aagaaaacaa ggattttaaag accatgacta ttaagcaact catgggctcc ttacaagcat 300  
acgaagaaaa acaaaagaga aaaattaaac aaaaggaggc tacggagcaa ctactacaac 360  
tcaacgtata ggaagcaaac tatgcatatt acaagagcca aagaggacga ggtcgtg 417

<210> 5138

<211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5138

agctngtagg ttaagtgaca gtgattggac tggagatgaa gatgatcgga aaagtactag 60  
 tggatttggtg tttttcatgg gggaacacaa ctttcacttg gatgtcaaaa aattagtcga 120  
 tagtcactct ttcaacttgt gaggcagaat acatagcaac tacttcatac atttgtcatg 180  
 cagtctggct taggaatttg ttaaaaaagt tgggcatgct acaagaatag ccgaccaaga 240  
 tctttgttga tagtaagtca gccattgttc ttgcaaagac tccagtgttc catgatcgaa 300  
 gcaaacatat tgatacatgt taccactaca taaggaggatg catagcaaga aaggatgtac 360  
 atgcagaata tgtgaagtct caagaccaag tagctgacat cttcaccaag ctgctcgagt 420  
 aagaagactt aatcaa 436

<210> 5139  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<400> 5139

gagcgtctcg atatattacg ggactcattc agacattcga gtaaaaagtt attgtccttt 60  
 gaatttgctc agatctttga aattcaattt ctagcatctt ttatattacg tgactcaatc 120  
 cgacatccga gtaaaatggtt attgtcgtgt gaatttgctc agagctttta cattcaattt 180  
 ctagcatctc gatattattac gtgtctcatc cgacatccga gtaaaaagtt attgtcgttt 240  
 gaatttgctc agagctcatt attcaatttc tagcgtctcg atatattacg ggactgaatc 300  
 agacatccga gttaaaaagtt attgtcgtta cactatgctc aaaacttcaa cattaaatat 360  
 cgagcatctt gatattattac gggactcaat catacatccg agtataaag 409

<210> 5140  
 <211> 437  
 <212> DNA  
 <213> Glycine max

<400> 5140

tgttgtcatt aaatcttaca tgaattgcct cttccatagt caagggtttt gatttgatca 60

ctctatatgc cttggatgat tcaaagtatc caatattcca aaatcacatt ttgagtcaaa 120  
 ctttccaagg ttatccttgg tgttgaagat gaaacactgg catccaaatg ggtgaaagtc 180  
 agaaatgttg ggcttatgtc cctcccacaa ttcataggaa gtctttttta agattgacct 240  
 tatataaatt atgttctgta aataataagc agtgattgct gcttcagccc ataagtgttt 300  
 cagagttaag tagtcgttaa gcattgttct tgccatttcc tgaagagaat ccattttcct 360  
 ctcaacaact ccattctatt gtgatagtct tggagtagaa acaatattat gaataccatt 420  
 ctcttcatag aattttt 437

<210> 5141  
 <211> 419  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5141

agaatcggac atccgtgtga aaagttatga ccatttgaat ttctcaagag cttccgttgt 60  
 tcaatttcga tcctctcgac atattatgca cccgaatcgg acatctgtgt gaaaagtcatt 120  
 gatcatttga atttctcgag agtttccgat gtttaatttc gagcgtatcg atatattata 180  
 accctgaatc ggacctcagt gtgaaaagtt atgaccattt gaatttgacg agagcttccg 240  
 ttgttcaatt tcgaatgtca ctgtatgtga tgcgccctaaa ttggacattc gagttaaatg 300  
 ttatgaccat ttgaatntct caagagcttc cgctgttcaa ttctgagcgt ctcgatatgt 360  
 gatttgccctg aatcggacat ccgtgtgaaa agttatgacc atatggaatt ctcaagagc 419

<210> 5142  
 <211> 421  
 <212> DNA  
 <213> Glycine max

<400> 5142

tcttgagtgg gaagcacaat gagcctataa acattgtgca ttatgctgac gacacggtct 60  
 ttgttggaga ggcctcttgg gataatatc tagtgttgaa atccatgctt aggggatttg 120  
 aaatggcttc tggtttgaga atcaactatg caaaaagcca atttgggggc gtcggttttc 180  
 aggccaatg gactcagcaa gcagcccaat tcctgaactg tagacagttg gatacccctt 240

tctactatatt atgcatgcct attgctgtta aagcttccaa catgggtggtt tgggagcctt 300  
 tgtttaacaa attacaagcc aagctctcat agtggaatca gaaaattttg tctatgggtg 360  
 gtaaggttac cttgataaaa gctgtcctga gtgcactcgc tatatatctt ctatctttct 420  
 t 421

<210> 5143  
 <211> 321  
 <212> DNA  
 <213> Glycine max

<400> 5143

agctatacca gctggtttat tacaaccttt ttccattcca caaagaattt gggaggacat 60  
 tgctatggat ttcactacta atctacctcc ctcacgcggt tatgtacta tatttgttgt 120  
 ggtggatata ctttcataat ttgctcattt tataccattg aaggctgctt ttaatagcaa 180  
 atctgatgca gatgctttca tttctaatta tgacaagatg catgggtatt caaatacatt 240  
 agtctttaat agagatcgta tttttatcat ttcatttcgg cagcagttgc tcatagcaca 300  
 tggaactata taggctatga t 321

<210> 5144  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 5144

cggaagctct cgagagattc aaatggtctt aacttatcac atggaagatc gattaatgcg 60  
 cataatatac cgagacgctc gaaattgctc aacggaagcc ctcaagaaat tcaaatggtc 120  
 atatcttatac acacggaagt ccgataaagg tgcatagtat attcgagaat cttgaaattg 180  
 aacaacggaa gctgtcgaga aattcgaatc gtcataactt atcacacgga agtccgattc 240  
 atgcgcataa tatatcgaga cgcttgaaat agaacaacga aagctctcga gaaatacatg 300  
 tggtcataac ttttcaacgg aagtccgatt aggtgcataa tatatcgaga cgcttgaaat 360  
 tgaacaacag aagctcttga gaaattcaat cgatcattac ttatcacacg 410

<210> 5145  
 <211> 287  
 <212> DNA

<213> Glycine max

<400> 5145

agcttgatat tgaacaacag aagctcacga gtatactaca ttggtcataa catgtcacac 60  
ggaagtccga ttcattgtgca taatatatcg agacgctcga aatagaacat cggaggctct 120  
cgagaaattc caatgggtcat aacttggtcac acggaagggtc gattcaggcg cataatatat 180  
ctagaagctg gaaattgaac aacgaaagct ctcgagaaac acaaattggc ataacttgtc 240  
acacggacat tcgattcagg cgcataatat atcgagacgc tcgaaat 287

<210> 5146

<211> 373

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5146

tcatttatnt tcctttagtt tctgttacgt gatctctccg ttttctaact tgaatatcaa 60  
tatagacagt aataaacaca tttaaattatt aaatagtaat acctgagaca ggaatttata 120  
tagcgattcc ccttggtagc tgcattcaagc actgcaaaac cacaaaatat gaatgattat 180  
tatgattttt tttatgaatt tttaattaga gagagatgtg attgggaaat tacagcacca 240  
gattcctgaa ggcgaccggt ggcattcggtg aagcactgca tgtgatggaa agagggtggat 300  
gtggattcgg agagggccaa tcggagggaa gcgaagagag aagtgaaact ctgagcgatg 360  
gccaacgagt ctc 373

<210> 5147

<211> 377

<212> DNA

<213> Glycine max

<400> 5147

tggaaggtag tcatacctta caaaacatat atatgtatgt ttaggtagtg aaaatacctt 60  
agatatgcat gtatgtaaac aaaaaaacac ttcacaaaat atatatatgt atgttttaggt 120  
agaaaaatac cttagatatg catgtatgta aacaaaaaac acttcacaaa atatatatat 180  
gtatgttttag gtagaaagat accttagata tgcattgtatg taaacaaaaa atacttcaca 240  
aaatatatat gtatgttttag gtagaaagat accttgata tgcattgtata tagcaaaaat 300

accttacaaa acatatatat gtatgttttag gtagcaagat accttggata tgcattgtata 360  
tagcaaaaata cctcatg 377

<210> 5148  
<211> 344  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5148

agctntatga taggagtgtg aagcatgtgt tcattgggta tgatgcaagt tcaaaaggct 60  
acaagttgta caatccatac aatggaagat tgttgtaagc ataaatgcta aatttgatga 120  
agaagagaca tggaattggg agaaaaaaga agccccctat gatttatctt cttattttga 180  
agaaaatgat gaattaagtg tagcaccaaa tgagatttct actccacctc ctatacaaac 240  
tcattcaatt catgaagcat catcttctga agggagttaa agtgaaagac caagaaaaat 300  
gagaagcctt ctagacatat ctaatggatt gtttgagggt tatt 344

<210> 5149  
<211> 410  
<212> DNA  
<213> Glycine max

<400> 5149

agcttaactc tcaaattccc ctccatccca tgctcttttg atataggcat tccttcatta 60  
gggacaacaa cctcagcacc aggtttgaca atatctgtca atgggatcat gagactcctt 120  
ccgtccaagg tggtgagatc caacgtttta ccagtaaggg cctcaagaag gggtatctct 180  
tggttgatca ccaaatcatt accatccctt ctataaagag catgcggctt ctcatctatc 240  
acaaaaatga gatctgctgg gatgacacca ggctcacggt tacctttctc tgggaaggta 300  
atctttgttc ctctcttcca gccagggttt atctcgatag tcaaaatctc ctccacatcc 360  
ccacatttgc tgaaatggaa ttgcatgtgt caaatattgt caaaaaaac 410

<210> 5150  
<211> 431  
<212> DNA  
<213> Glycine max



<223> unsure at all n locations  
 <400> 5150

agcttcctct tatgagtgca tagctctttc ataaatttag catatcttgg aatatgcttt 60  
 attgcatcca gtagaggat gtttacctct actcttctaa atgtttccaa gatctccttc 120  
 tccgcctctt ccattttctt gttggaaatt gctcttgggt ggaatggaag agggatatgc 180  
 tactactgta agtcagaatt accagtagaa gattcacctg catagaaatt gttaggcaac 240  
 ttactcttta aatttttgtc atcatctttc tctggagttg agtgagggtt ggcaggttca 300  
 tttgcagatg aggaagatgc tactagtga ggtccttgat actgttttcc caacctcaat 360  
 gtaattgcac tcacantttt gggattctgt acagattgag aaggtaatct gtcagaattc 420  
 tgggactgtt t 431

<210> 5151  
 <211> 433  
 <212> DNA  
 <213> Glycine max

<400> 5151  
 tctcagatct ggtcatggaa agacttggct actgccttca ttaggaagta ccaatacaac 60  
 acggatatgg ctctgatcg gaaccaactt cagagcatga ccaaacggga acatgagtcc 120  
 attaaagaat atgctcaaag gtggagagac ctagcaatcc aagtcatccc acctatgacg 180  
 gagaaggaaa tgatcacaat tatgataaat acgttgcccta cgttctacta cgagaagctg 240  
 ataggatata tgccggctaa ctatgcaaac ctogtctttg ccggagaaaag aatcgagtcc 300  
 ggactgaaga aaggcaagtt tgaatatgac tccaacgctg cccccacaac aatagaagag 360  
 ccccatgtgt gggcacacgc gaaaaggaag gagataccca cgcagtcacc actcgcccaa 420  
 catggatgaa aac 433

<210> 5152  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<400> 5152  
 agcttaaagg aagtgaacga attagtatgg tcagaaatgt ctccgattg attggtaaatt 60  
 ctgttctca aattcctgaa aaatgcacag atccaggtac attcagcata cttgtatta 120

tagggaatag taagtttgac aatgccatgc tagatttagg agcctctgtt agtggttatgc 180  
 ctctgtcgat ttttaattct ctatctctag gtcccttgca gtcaactgat gtggtaattc 240  
 atttagctaa tagaagtgtt gcctatcctg ttggtttcat agaagatgtc ttaattagag 300  
 ttaatgaact gattttccgt gttgatttct atatcttgaa tatggaagat ggattttctc 360  
 aaggatcacg tcccatcatt ctaggcagac cgtt 394

<210> 5153  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5153

ntgagccaat tcaaacgaca ataactnttt actccgatgt ctgattgagt cccttcatat 60  
 atcgagacgc tcgaaattga atgctgaagc tctgagccaa ttcaaacgac aataactttt 120  
 tactcggatg tctgattgag tcccgttaata tatcgagacc ctccaaattg aatggtgaag 180  
 ctctgagcca attcaaacga caataacggt ttactcggat gtctgattga gttccgcaat 240  
 atatcgagac cctcgaaatt gaatgttgaa tctccgagcc aattcaaacg acaataactt 300  
 ttactcggga tgtctgattg agtcccgtaa tataacgaga cgctcgaaat tgaatgttga 360  
 acctctgagc caattcaaac gacaataact atttactcgg atgtctgatt gagtcccgtg 420  
 atatat 426

<210> 5154  
 <211> 361  
 <212> DNA  
 <213> Glycine max

<400> 5154

agcttcaaca ttcaatttcg agtgtctcga tatatgacgg gactcaatca gacatccgag 60  
 taaaacgtta ttgtcgtttg aattggctca gagcttcaac attcaatata gaggggtctc 120  
 atatattgcg ggactcaatc agacatccga gtaaaaagtt attgtcgttt gaattggctc 180  
 tgagcttcaa cattcaattt cgagagtctc gatatatgat gggactcaat cagacatccg 240  
 agtaaaaagt tattggcgta tgaattggct cagagcttca acattcaatt gcgaggggtc 300

cgatatatta cgggactcaa tcagacatcc gagtaaaaag ttattgccgc ttgaattggc 360

t 361

<210> 5155

<211> 415

<212> DNA

<213> Glycine max

<400> 5155

agcttaataa atctatatat ggtttaaaac aagcttcccg tcagtggtag cttaagtttc 60

atgggataat ttcttcattt ggttttgagg aaaaccccat ggatcaatgc atattccaca 120

aggtcagtgg gagtaaaata tgtttccttg ttttatatgt agatgatatt ttacttgtag 180

ccaatgatcg gggtttgcta catgagggtga aacaatttct ctctaagaat ttgacatga 240

aggatatggg tgatgcatct tatgtcatcg acattaagat tcatagagat agatctcgat 300

gtattttggg tctatcacag gaaacctata tcaacaaaat tgtagagaga tttcaaatga 360

aagattgttc accaagtgtt gctcccattg tgaagggtag taggtttaat ttgaa 415

<210> 5156

<211> 428

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5156

agctngaagg tgtgtaaccc accattttcc atagtataat actggtaatg tgtctactat 60

cagtgttacc atttttttctc cgtcattgag gtgccacttg agctgccagg tctctccacc 120

tttgggcgta ttctttgaat gatctgtgcc cttttttgca catgttctat agttgcatcc 180

tatccgaaga cattatacta gcaactgcta acgaaggcaa ccagtaggtc cttccaagaa 240

tggactcgag aaggttccag gttagtgtac caagtaacag ctaccccagt aagactctct 300

tggaaggcat gtatcaacaa ttctctatct tttgcgtatg ccccatctt ccgataatac 360

atctttatat ggatcttggg gcaagtagtc cgcttgtagt tgtcaaagtc caacaccttg 420

aacttggg 428

<210> 5157

<211> 289

<212> DNA  
<213> Glycine max

<400> 5157

cgcataccaa atgttcacca ctactagagg atataccttc ttcattgtgc atatgaatct 60  
cctcctctaa atcaccattc tgaaagacta ttttcacatc catttggtgc aactcgaggt 120  
ccacatgagc aactaatacc aagatagtct gaagagaatc tttcttagat ataggagaaa 180  
aagatttgtg ttagtcgatt acttctatct gagtaaatc ttttagcaac agccttgctt 240  
tgtatctctc aatgttgctt aatgaatccc ttttggcctt aacgactca 289

<210> 5158  
<211> 431  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5158

tcaacatcag accacttcca ggggtgctgga actacttcac atggacttga tggggcctat 60  
gcaagttgaa agccttggag gaaagaggta tgcctatggt gttgtggatg atttctccag 120  
atttacctgn gtcaactnta tctgagagaa atcagacacc tttgaagtat tcaaagagtt 180  
gagtctaaga cttcaaagag aaaaagactg tgtcatcaag agaattagga gtgaccatgg 240  
cagagagttt gaaaacagca agtttactga attctgcaca tctgaaggca tcaactcatga 300  
gttctctgca gccattacac cacaacaaaa tggcatagtt gaaaggaaaa acaagacttt 360  
gcaagaagct gctatggtca tgcttcatgc caaagaactt tcctataatc tctgggctga 420  
agccatgaac a 431

<210> 5159  
<211> 375  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5159

tgctcttctg ctgtcaaata tgaacttcag ttcattctct gctcatgtac taacanagaa 60  
ncttgcaatt catcaaggga ggggtgcatct atatctttgg actcttcaat tgcacaaaca 120  
acataatcaa acgttggtgt tacggatcgc aaaatctttt ctacaatggt gacatctttc 180

atcttctcgc catggaatca catcatgttt cttatctcca ttgttcttgc aaaatagcta 240  
gaaatagatt caccatcctt cattgctaata gtctcaaaat ctcttcttaa gctctgagct 300  
gtgcacgctt cactctagca gaaccttgat actttttctt catagaatcc canatgtcct 360  
tgaaagtttc tctgc 375

<210> 5160  
<211> 359  
<212> DNA  
<213> Glycine max  
<400> 5160

agcttgtaat cgattacaca tatactgtat tctattacca gagcagattt tcagaatata 60  
ttctcaacag tcacatcttt ttacgtgggt cttgaatggc tatcaaaggc ctatatatat 120  
gtgacttgag acacgaattt gctaaaagtg ttttagaaca aaaagggtctt atccttctta 180  
tagagcaaaa tcgacttatc ctcttacaaa ttccttggcc aaattacttg tgattcaata 240  
acgaattatt tgagtgtca cattgtacaa tctatctctt ttaagagaga gtacttgttc 300  
tcttcttctt cattctgaaa agggattaag agactgaggg tcttcttttg ggaaagaat 359

<210> 5161  
<211> 423  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5161

agctnnttag aaatatTTta ataagtatta gaaaataata ttactagaga ttaggtgtgt 60  
taaagttagt tggactatTTt tgtatacaga aatatTTtat ataaaggacg tcgaagtatt 120  
gcttatattc ttaattatat atttcttata ttctaaaaaa tgtgtgagat taatttcttt 180  
attattcaat ttataaatta tttgaaatac atgcatggat cggaatgcaa gttgaatacc 240  
caaaatgtta gttatataaa cataaaatgg tttataacac ttctattact tacttgactt 300  
aatgtttaac actttaacta aaggatattt caaaaagtgt caatgaataa acaaatagat 360  
aagatcacgt tcgagttctt taattactcg gaagtgacac acagaaagta ngtttgactg 420  
ttg 423

<210> 5162  
 <211> 439  
 <212> DNA  
 <213> Glycine max

<400> 5162

tgtgttgcaa aagttggtgg tattcataca aagatggggt tgagcttaga tgtcattact 60  
 aggtggaatt ctaattttgt gatgcttgag agtgcccttg tatattgatg tgctttttgt 120  
 agtcttgcaa ttgatgatag gagctattca agttgtccta ttaatgaaga atgggagaga 180  
 ggacaaaaaa tgtgtgattt ttgtcatcct ttttttcaaa tcacagagtt gatatctggt 240  
 tcctcttacc caatgtctaa ttgtatttc atgtaagtgt ggaaaattga atgtttattg 300  
 cttcaaaatt tgagtaataa agatgagttg attagaacaa tggcaattga tatgaaaaca 360  
 aagtttgata aatattggag tgattatagc aatgtgcttt cctttgggtg cattctagat 420  
 ccacgctcta aaataaaaa 439

<210> 5163  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<400> 5163

cgtcttgaca tattagaagt ttatacacat gataaaaaca ttctgaagaa ttgcttatga 60  
 ttaatagcat gttttcgtaa' tttttctttt aataaaaaga gattttaagt gaattagtaa 120  
 ttagtgagga tagaagtaaa aagaaaaaaa gaaaaaggaa aaaagccagt aatatgtaag 180  
 ttataagcta gttgaagtaa taagccaaaa attacataaa taaaatagca taatgtatat 240  
 ctaataaatt ttttttgatt aaaataacta gtcaaactaa cttatactag agtggttgtgt 300  
 taaacacaat tggaaaaaat tgttgacggt aattattatt taaatacggt tatgatttat 360  
 attattatca aaaattataa tcttaataga aggaaaaaaa caacacctta atggttttaa 420  
 gctattgaaa gcaaagaaaa 440

<210> 5164  
 <211> 435  
 <212> DNA  
 <213> Glycine max

<400> 5164

tgttcttaag caaaagctaa ctaatgcccc cataactgcg ttgccaaact ttcaaaaatc 60  
ttttgaaatt gagtgtgatg cttcaaagt tgggattggg gctgtgttga tgcaagaagg 120  
ccatccaatt gcttatttta gtgaaaagtt aagtggctct acccttaact attcaactta 180  
tgataaggag ttgtatgcct tagtacgggc tttgaaaaca tggcaacact acctttatcc 240  
caaggaattt gtcattcata gtgaccatga gtcctcaaa tatatcaagg ggcaaggcaa 300  
gcttaacaaa aggcattgca agtgggtgga attcctatag caattccctt atgttatcaa 360  
acataaaaag ggaaaaggta atattgtagc cgatgctctt tctcggcgtc atgcattact 420  
ttctatgctt gaaac 435

<210> 5165

<211> 397

<212> DNA

<213> Glycine max

<400> 5165

agcttgaaat tgaacaacgg aagctctcca gaaactcaaa tggtcataac ttatcacacg 60  
gaggtccaat tgaggcgcac aatatatcga gacgctcgaa attaaacaac gaatactctc 120  
gagaaattca aatggtcgta acttatcaca cggaagtccg attcaggtgc ataatacacc 180  
gagacgctca aaattgaacc acgaatgttc tcgagaaatt caaatgggtca taaattttca 240  
aacggcagtc cgatttaggc gcataatata tcgagaatct tgaaattgaa caacggaagc 300  
tatccagaaa ttcaaattgt cgttactcgt cacacggaag tccgattcag gcgcataata 360  
tatcgagacg ctcgaaattg aaaatcgga gctctcg 397

<210> 5166

<211> 461

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5166

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cgaggctgca gaagatcaat ttacaaaatt gtgaatatta tgacatcacc aacatcatat 120  
acatctgcaa atttcttggt agtagatcaa attcattctg cccaaaattt tagcacaact 180

caaagtgtgc agactgcaga agcaagccat acctgaaaaa gtgtcattgg aaaagagtgg 240  
 tgaatttccc tgcctttgat ttcattctggc acaatgtttc tactaatgga tatgttaagg 300  
 taactataca tcaaagccaa aaacttggca atgaccaaag cttcataaca ttctttaact 360  
 gactccaaaa aggtgaaaaa ctcttgctt cctctgatat ccaagagacc cacaaaggag 420  
 acagctgcat agattggagc catgaggatg ataatgataa t 461

<210> 5167  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5167

ntaccctctc ttataacatg cagaattcga aaattccact acataaagac aaatgatcta 60  
 atatggttga ccagatgagc ataaatatga caggaactca ctccaaggga aatcatgtcc 120  
 acaacaagct nggagtcata ttcacaaatg atgcttgtaa cacccttata ccacgcaatc 180  
 tgcaaccctt gagcaatggc aagcaacttc gcattcagac tcatttgtgaa gcggcaacaa 240  
 ccaaaaaaac tgagaaatca attacccaaa ttatcacgaa tcaatctgtc aattccagcc 300  
 tgactcggat tgcctaagga gcttctatca gtgttgagtt tgtaatcaaa atcaaccgga 360  
 ggagaccaac acaccatacg actaggaaga cttgagatat tgtgatgag 409

<210> 5168  
 <211> 424  
 <212> DNA  
 <213> Glycine max

<400> 5168

agcttttagaa ctagcatgat atgccatgaa ttcttcatac acactttcaa gatcaggagc 60  
 tcttttcttct tcataattga aattctgata ccaggggaca gatgtcgtac cggatgtcac 120  
 gacatcacgc ttcagaacat gcagattata tgtgtccgta tgaacagatt aaacaagtaa 180  
 ataacaccag agaattgttt acccagttcg gtgcaacctc acctacatct gggggctacc 240  
 aagccaggga ggaaatccac tctcaatagt gttagttcaa ggtctaacag cccctgttta 300  
 caaccttctc acctaaccac taccgtgcg atctctacct aagagccact cttagatatg 360



agaaccttcg ctcactccct ctcactcaca ctcccgtgtt tacaattaag tcaaagacac 420

acca 424

<210> 5169  
<211> 430  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5169

agcttggaca ggaggataag gatgatacct gataacttta tgcccacccc ggatttcgac 60

attttcaact tgaaaaaggg tttaggggtg ggggagtta aaaaaagcat ttaatcgaa 120

tgcattgata gtttaggtat ttataatga aatgcaatat atagtaatat tgttgctttt 180

tctaacaatt cttttaaaag ttatatttga gatgattttg taaaaatcat tatagtaa 240

tagtaatgta tcaaaattaa aattttaaaa atatgttgag gcatgattta atttatgtta 300

ttntatcaaa ataaactcta aaatttattt taagaagctt taagggtcaaa attataatat 360

aaacttttta gtgatactaa actcgttcat tcatgatttt ntgttggtgtt tcaaaattca 420

cttttactaa 430

<210> 5170  
<211> 398  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5170

cgagggttaat cgtaaaactg caaagacatg accttgtgag aggtttacca agaatgtcat 60

acaaagttga tttactttgt gaagcatgtc acgagaggaa acaaattaaa acctctttct 120

caagcaaaaa ctctatttcc acctaaagac cacttgaatt attacatata aatttggttg 180

gtccaactag aacaacctct gtcagtcgaa agagatatag tctggtagta gtggatgact 240

actcaagatg gacatgggtt atgttccttg ctcaagaagaa taattcctta gagatcttct 300

ttaaattcta taaaaggatt caaatgaaa agggagtatg ccttacttca ataagaagtg 360

atcatggtgg agagtttgaa natgagaact ttcattca 398

<210> 5171

<211> 423  
 <212> DNA  
 <213> Glycine max

<400> 5171

tagctccata ctcgaagggtg gaggacacat gaacagtgt atgcaatgac attcaagggg 60  
 cttcgaataa agtggagaat ggaggattgc acttgagggt ccacacttat gcaatcatga 120  
 agtatagctc caaactcgaa gatggaggac acatgaacaa cgctaggcaa tgacattcat 180  
 ggggcttcga aaaaagtgga gaatggagga ttgcacttga ggggccacac ttaggcaatc 240  
 atgaagtata gtcctaaact cgaatgtgga ggacacatga acaacgctag gcaacgacat 300  
 tcaaggggct ccgaaaaaag tggagaatgg aggattccac tttagtgtcc acactaaggc 360  
 catcatgaag catagcttcc aactcgaaga tggaggacac atgaacagcg ctaggcaatg 420  
 aca 423

<210> 5172  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<400> 5172

tgagactgag tgaacgatcc atgatatcac catattattg catcttttcc atgcagaatg 60  
 cagaggatgg gtaatgactg gttgtgagat agttccatcc acaaattcaa ccttgttatt 120  
 tgcactcaga gtagtaagca ttgaacgact ccgaggatta taattcgggtg gatcaagaaa 180  
 tggagatata agcggttattg ctgaactttc actagggtga aggtaatagg aactatgaac 240  
 attcaaagat tggtcagttt ctgtgttcat gttcaatcaa tagagtagag attctcttga 300  
 aattgaggaa gatagaaaga aatttcaaag aatcgaacaa accgaaaatc gcagaagcag 360  
 agaatggacc acataagcga aaacagagtg tgaaaaaaaa atgatgcgaa gagtggcaca 420  
 tcagacctct tcaatcgaag 440

<210> 5173  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<400> 5173

cttgatgggt gtgttgaatg cattaaaggt aatcaaacca atagcaagaa attaagtga 60  
tatagggcta caaacatctt ggaattgata catacgaata tgtgtgggct atttcataca 120  
ccttcgtgga atgggtcaaca atatcttata tcattcatag acaattactc cagatatgca 180  
tacttggttc ttatacatga aaagtcacaa tctctggatg tgttcaaaac atctaaagtt 240  
gaagttgaaa atcaactcaa caaaagaata aagtgtgtca gatcttaccg tgggtattgct 300  
ccaagaacat gaggaaaata atgggtatgat ggaaaatgac ccataaaata agggtagaaa 360  
ctttgtctt 369

<210> 5174  
<211> 427  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5174

ntggccgatc catatcctcc accaagaata tttnttgata gatattcttc acctccatt 60  
tcactttctt aggatccacc tcttaaattc catcaatatg tagacccta ttagatattt 120  
tccttctcct ccaattaata gtaccatgga agaattatga gttgttgtct ccttccacta 180  
accatctaga tctagatttt tgtcttagaa atgactcatt cctccttgcc aatatccaaa 240  
attgctcttt caaatctatc ttcatgttca attcactctc caccaaaact ctagcctcct 300  
caagcttatc caactcattc attttcaagg caatctcttt ctgtgatgaa tgaaagtctt 360  
caaaacatgt agcattccac tctctaagca ccttctagag gccttttaga tttcactgag 420  
gacatat 427

<210> 5175  
<211> 430  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5175

agctngctcc atataaatat atatatatat atatagaggt atatatatat attgaggaga 60  
aagataattc aaggaaacaa ttcctatgat gagataagta gattatgatt atgatgatgg 120  
caagttcaag agaaggctgt caagcaaagc aagagggtga caccactaat attgacaagt 180

tctcccaggc atcgtccact tcaagacaat ggtcagcttt cataaatcca agaattgtga 240  
gagtgtcacg ttcttttgga gggaaagata ggcatagcaa ggtttgcacc ataagagggg 300  
tgagggacag aaggattatg ctctcagttc ccacagcaat acagctatat gatcttcaag 360  
acaaacttgg actaagccaa ccaagcaaag tgattgattg gttgcttgaa gccacctaaa 420  
ttgacattga 430

<210> 5176  
<211> 426  
<212> DNA  
<213> Glycine max

<400> 5176

agctttaaga gaagttgcaa gagaaaagac tacagcctca atgtggctga aactagagtc 60  
attgtatatg acaaagtccc ttgcaaactg actatgcttg aagcaacaat tgtactcctt 120  
caagaagaca gagtcaagaa cagccactga acaattggct gatttcaaca agattcttga 180  
tgatttgga aatattgaag taaagcttga agaggaggat aaagctcttt tgcttttgaa 240  
ttccttacca aaatcctttg aacatttcac ggatgcaatt ctttatggca aagatcaaga 300  
cattgcccta gaagaagtcc aaacctcaat aaggaccaag gagatgcaaa aacagcaaga 360  
ctccaaatct gaggataatg gtgaaagcct gaatatttca aggggaagga gtgaaaagaa 420  
ggaaca 426

<210> 5177  
<211> 531  
<212> DNA  
<213> Glycine max

<400> 5177

tatgctgcaa acatttataa tagacctoct cagcagcaaa accaacaaca gaaaaataat 60  
tatgaccttt caagcaatag atacaatcta gggtggagga atcatccaaa tctgagatgg 120  
acaagtcctt cacaacaaca acagcttata cttcctttct agaatgctgc tggccaagc 180  
aagccatatg ttctctctcc aatacagcaa caacagtcac aaaaaagaca acaagcaatt 240  
gaggctcttc ctcaaccttc cttagaagag ttagtgaggc agatgaccat ccagaatatg 300  
caatttcagc aagagacaag agcctccatt cagagtctaa caaatcagat ggggcagatg 360

gctactcata tgaaccaagc tcaatccaaa ttctgacaaa ttgccttcat aaactgtgaa 420  
 aaatccaaaa aaatgtgagt gtcacacacct tgaggctctgg caaccaaatt caagtgccta 480  
 caccagtagt agcagctgca cctgaacctg tcaagctata ttctacacct g 531

<210> 5178  
 <211> 564  
 <212> DNA  
 <213> Glycine max

<400> 5178

tcatgatgaa tcaagattga ttcaaagagt tttgatgata acaaagatga tgaacacttc 60  
 atgataacaa agatgatgat ctttaagaatc aaagaatgag ttcaagattg aatcaagtac 120  
 acttcaagga tcaagaggaa agttgagttc aagaatcaag aatcaagttt caagattcaa 180  
 gttccaagaa tcaagatcaa gattcaagac ttaagattca agaatacaaga gaagacttaa 240  
 tcaagataag tattaataaag ttttttcaaa aactgagtag cacatgaatt tttctcaaaa 300  
 cctgttcacc aaagagtttt tactctctgg taatcgatta ctagattatt gtaatcgatt 360  
 accagtagca aaatgctttt caaaaagcct tcaactgaat ttacaacgct ccaattgatt 420  
 tcaaaaagct gtaatcgatt acaatgtttt ggtaatcgat taccaatgtg cttgaacgct 480  
 gaaattcaaa ttcaaagtgt aagagtcaca ttctttcaca aagaaacttt gtgtaatcga 540  
 ttacactgat ttgggaatcg atta 564

<210> 5179  
 <211> 542  
 <212> DNA  
 <213> Glycine max

<400> 5179

ttataccgat atgggctcaa aacggcagca ggtatcttca gtttccgagt aagtggcttc 60  
 cagggtctgc tcatcaattc agttggctga acaacatcat cctctttttc atttccaaaa 120  
 ccaccttcct ttggccatat agcattgcca tagccatagg tgccctttgt ttcaaagagc 180  
 cacctattat gatcaaaatc tccagtttgg ctctcatta gtgccgactt tgttgatttc 240  
 atcatggaca atctcctctc catttttagac attccacttg gtggaggaag tggaagggga 300  
 cgtccattat ctacagccac ttcatctagc tctgtgttct tgtatggctc cttgcatcct 360

gggcatatac cacctcctgg ttttacagca tctatataac aatctctgca tatcttgaaa 420  
 tcacactcac atgggagaat atcagcacca cgttcatcgc tcatcacctt agaatcacia 480  
 ccaggaattg cacatgaaga tcctcttgca ccagccatct gcggatgatt tgcttcagat 540  
 tc 542

<210> 5180  
 <211> 510  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5180

agcttggcaa caggtgaaaa agtgtctgaa aaatctattc cagcttggtg tgtgtaggct 60  
 ttagctacta attgagcttt gtatctgtcc actaccatta ggtttatatt tgagcttgta 120  
 aacccatcta tatccaatac agtgcttgtc agtaggtaaa aagactagag acaagtgtta 180  
 tttgcttcta atgcttaaat ttcttcagtc ataactgtc tccacttagg gtatggaatt 240  
 gcttgatgat aaaaccgtgg ttcataagta gtggagattt gattgatgaa gttgtgataa 300  
 gatgagctaa gtcgagccat gaaacaataa tgtcatatta gatatgggtg agaagacgcy 360  
 aagtagatga aattagacaa gtaaaaaggt ctcttatgct ttctggatga ctttctaaga 420  
 attttttgtg gtggcataga ctcaaaaact ctanttgaag aagtggtagg aagagggaca 480  
 ggatttgacc gagtctttgt tgattgagca 510

<210> 5181  
 <211> 478  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5181

agctttcaac ttattgtgat gtattaaacc atccaaaaag ttggtgtgat gatgcttttc 60  
 caaaatagat tatggtcaaa aatcctgcat ccactatata cattattatt atcaacaaga 120  
 tttaatgtcc tgattaattg tataaagatt taaaaagatt agcacgtact acagattttg 180  
 aaatacttcc ttgaaaatca cattggtagt tatatttcat agttttcctt ctttatcatg 240  
 aatcagaatt ttcaatatac ttttactttg aactcttgag aatgccacat aaagttggcc 300

atgactgaaa actggttttag gtagatataa cccaaccgat tcaagagatt gtccttgaga 360  
 tttatagatt gtcatgacat atgaaactat aattgagagt ngcttctaata catcttgaaa 420  
 ggccaggaga atgagatggt gataatgaca ttcattggaac atacacaaa ctacctat 478

<210> 5182  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<400> 5182

cttgcaacttg agtgatgtag ctcttgtag agcttgtaag cctttttttt tcttcatcaa 60  
 cggagtcctt tgcttcttga agattacatg ggggtggaatg gagatggaat aatgatgact 120  
 tggagatgcc actttctgga gaagattagt caagaagaag ctcaccacca tatgctgcca 180  
 ttgataacat ctttcaagtt atatccttgg actgctggac tgggtttatt tgtgcacaat 240  
 atttcatgcy tctaaagctt gctgcacttt gcccatcttg tctcctatga tcgggggttga 300  
 attaaggctc acacctgacc actatttata gcctcagtgt cacacaaaat tctacggata 360  
 gcttaatttc tatccaaagt tcacttgagt ttgaaattga atttgtgcag ccaaattttg 420  
 gaacca 426

<210> 5183  
 <211> 519  
 <212> DNA  
 <213> Glycine max

<400> 5183

agcttatcat gagagatatg tcctaaccta ttatgccaaa cattgcattt attgaaaggg 60  
 atggtattga ttttacaagt gtaggacaac tgagttggtg atgaagatag gatgtataag 120  
 ccaacactta attcagctgc tccaatcgtc ctcaaggagg agttgtcctg tatagaacaa 180  
 ccagtagggg gaaaaatcat actacaatgt agattagcta tgagtcttga aactaaaatc 240  
 aagttgaatg tgaaagaagg aatatacaag acatcagtga ggtaaagttg atcattaaaa 300  
 tgtatagtgc ctgccaaatt gggtttgaatt tgagatccat caggtagttt aacaagtata 360  
 ggtctaattt gcttaaggca ttgaaactga gtttgggaaa aacacatatg atcagtagct 420  
 ccactatcca aacccaaga gtttatgttg gaactataag catgaagagt ggcacagaaa 480

atacctgaat tctcattctt atgagagcta accaactga

519

<210> 5184  
<211> 319  
<212> DNA  
<213> Glycine max

<400> 5184

tgcacttgag gtatcaaaac cagtgggagg atctacatat actttctctt ggataaaacc 60  
attcaagacg gcacttttta catccatttg gcaaagccaa aaatccatta tcgatgccta 120  
tgctaataat atccttatcg gcttctaate taccaaccgg agcatgtgtt tcttcataaa 180  
ccaacccttc taggagacta tatactcgga ctacataacc catattgatt tgcaaggact 240  
atagaaaact aataccacta gctgataaat acccattttg ctacgataac aggataataa 300  
gcaggcttct cgactaatt 319

<210> 5185  
<211> 597  
<212> DNA  
<213> Glycine max

<400> 5185

tcaagatgtg atgtagctcc ttgtagagct tgtaggcctc ggatcttctt catcaatgga 60  
gtcctttgct tcttgaagat taatggcagt ggaatggaga tggaagaatg atgattggag 120  
atgccacttc aaggagaaga ttagtcaaga agaagctcac caccatagga agccattgat 180  
aagagcttga aagtaagaga aaaggagtgg agggaaaggg agagaaggag cacgaaattt 240  
tatgctcaa aagtagtctg aactttgaag ttttaattctc aaatgatcaa agttgaaaaa 300  
atgcacacac atgaccacta tttatagcct aagtgtcaca caaaattcga gggaaatttg 360  
aatttctatt caaattttac ttgagtttga aattgaattt gtgcagccaa attttggaac 420  
caaaatttca ctaattatga ttagtaaatt ttagctatgg ttcagccac taatccaaga 480  
tcaagtccaa gattctccac taaatgtgct taggtgtcat gagacatgta aagcatgaag 540  
gacatgcacg gagtgtgact atatgatgta acaatggggt gtagcaagca aatgctc 597

<210> 5186  
<211> 463  
<212> DNA



<213> Glycine max

<223> unsure at all n locations

<400> 5186

agcttctatt tcaactgagc tctttatatt tcgggaagag aaatcaactg ctgagagaaa 60  
ggtaattcta tgttataatt gaaattaaac caatttacag ttatctgttc aatattgaaa 120  
tccccaacct agttacccta aaattattgt acattggtag attctatatt atgtttatcg 180  
cttaccaact tttgtaccct acttctgatt ctgctgcgtt ttgcatgcca tttcaaatga 240  
ggacttgtac aaaagatcac aagagtataa tatgagtctg ctacagtaca atagtcgcct 300  
tcagtcggat cttgaaataa ctaatgaggc acataaacga ttggagacgg agaaagcaac 360  
cattgttgaa aacctancaa tgtgagaggc cacaacaagg cattacagga ccaggtgccca 420  
tctcttaaag taagttgttt tgtttgatta ttgattttaa tgc 463

<210> 5187

<211> 559

<212> DNA

<213> Glycine max

<400> 5187

tggaggtaaa ctagatgcct tgggttaacct ggtaacccaa ctggccatga ataaaaaatc 60  
tgcacctgtc gccagactct gtgggtttatg ctctcttacc gaccatcaca caaacctttg 120  
cccttctgtg caacaatctg aagcaattga acagcctgaa gcttatgtctg caaacatcta 180  
caacagacct cctcaacctc agcagcaaaa tcagccacaa cagaacaatt atgacctctc 240  
cagcaacagg tacaatcccg ggtggaggaa tcatcccaac cttagatggt cgaatccttc 300  
acaacagcat cagcaacaac aaccttattt tcaaatggtt gttgaaccaa gcagaccata 360  
tgtctccacc aatccagcag caacaacaac aacagcccca gaaacaacaa acatttgagg 420  
ctctccgca accttcatt gaagaacttg tgaggcaaat gactatgcaa aacatgtagt 480  
ttcaacaaga gaccagagcc tccattcaga gcttaactaa tcatatggga caatgggcta 540  
catagttaaa tcaacaaca 559

<210> 5188

<211> 563

<212> DNA

<213> Glycine max

<223> unsure at all n locations  
<400> 5188

tgaccaggaa ttatttggat gggttggatg tggaattcag gttgttcctg gtgcggagat 60  
gatggtactg tgggtgaacc agaagctgca gtttcttttg gtgaggtagc catggaaaag 120  
cagagcgttt gaaatgattt cgtaaacttc agaaggctat tgggaaatgc tggtaaaaac 180  
acgaatgcc aagcagatata aatttgaatg aagaatgtag aggggcgtgt gaagcaacgg 240  
tcgaatttgc tttgtagtga acgtgctatt aatgttaagt gattcgtttg ggcacgttca 300  
gattgcagta gctgctataa ttcctctagc agacaaatgc ccagcttgcc cctcagtttt 360  
tcaaactgat ttgcatccaa agcctttgtg aaaatatctg ctatttgttc ctcagtgtca 420  
acatgcttca gtgtgatcac tttatcatca acaagatctc tgatataggg atgtctaagt 480  
tcaatgtgct tggttctgct gtgttgaaca ggattcttag anatattaat agcactcatg 540  
ttgtcacagt acaatgtcat gac 563

<210> 5189  
<211> 497  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5189

agctngtaga aaattcaaac aggaataact ttttactcgg atgtctcatt atgtcccgtg 60  
atatatcgag atgcttgaaa ttgaaaacgg aagctcgtag caaatgcaaa acacaataac 120  
tttttactcg gatgtccgat tgtgtctcgt agtatatcga gacggtcggt attaaaaaca 180  
taacctcgta gcaaattcaa atgacaataa ctatttactc gaatgtttga ttgtgtccca 240  
tagtatatcg agacgctcgt aattgaaaat agaagctctt agaaaatttt aacgacaata 300  
actttttact cggatgtccg attgggaccc gtaatatatc gagacgctgg aaattgaaaa 360  
cataagctct taggaaattc taaagacaat gactttttac tcggatgtac gattgtgtcc 420  
cgtaatatat cgagactctc caaattgaaa acaaaagctc ctagcaaatt caaactacaa 480  
taacttttac tcagatg 497

<210> 5190  
<211> 620

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5190

tgtgactctt ggcaatttct ttaaaactag tcacttaaaa agttgaattt tgaaaaaatc 60  
 ttcagaaaca agtcacttga agaattgtga cttttggaaa tttatttttc gaaatcaaac 120  
 actggtaatc gattaccatt aagggtgtaat cgattacaca tcagcaaacg tgactcttca 180  
 ttttaaattt tgaaaattaa aacatttaga agctctagta atcgattaca caagtttaaa 240  
 atgatttgaa aatgttttaa cacaagttgt aactcttgaa atttgaaatc ttaacatttt 300  
 aaaacactag taatcgatta ctaccttctg gtaatcaatt accagagagt aaaactcttt 360  
 ggtaatgatt ttgtgaaaac ttcttgtgct actcaatgtt ttgaaaaact ctttttagtac 420  
 ttatcttgat tgagtcttct cttgattttt gaatcttgat cttgattatt cttgaatctt 480  
 agatcttgaa ccttgaaact tgattcttga atctttgcta gaaactgtgc ttaactcttg 540  
 attctttggc ttcacaaaa taaccttgga agacattgct tncacaatct cccctttnt 600  
 gatgatgaca aatctgaaat 620

<210> 5191  
 <211> 577  
 <212> DNA  
 <213> Glycine max  
 <400> 5191

tctttgagaa aacttccttg agaagctgga gcttagctac tcacaccctt gtcataacta 60  
 agctcacctc cttgagaagc ttccttaaga agattcctaa agaagcttga gcttagctac 120  
 acatacctct ctaatagcta agctcacctc cttgagatga gaagctagag cttagctaca 180  
 caccgctat aatagctaag ctacccccca tgacagaaaa cgtgagaatg ccacaaaaag 240  
 tccttactac aaagactact caaaattccc cgagatacaa ggctaaaacc ctatactact 300  
 aaaatggcca aaatacaagg ccagacgaa ggaaataact attctaatat ttacaaagat 360  
 aagtgggctc atacttagcc catgggctcg aaatttacct tatggctcat gagaacccta 420  
 gggccttccc ttggatctct agccaatcta ctcggagtct cttaccaat gcccttacgg 480  
 ggtaggattg catcagtatg tttgtcctg tgtatgttgg ttttcaagag aaattgagtt 540

tttaactaag tggatgtgat atatttgta ttgatga

577

<210> 5192  
<211> 480  
<212> DNA  
<213> Glycine max

<400> 5192

agcttctgtc cctgaaaaac tggttcttat atgacaacag ggagtgaaga ttgctgaaaa 60  
ccctagcctt gcaacaagtc ctagggaagt agacctggag atggataaga agatccgcag 120  
tattgtgagt agcattttga aagacgcctc tgttcctgat gctggtgaag atgttccaac 180  
atcctccacc ccgaatgttt ctgtgcctaa tgttgataaa gatgttccaa catcttccgc 240  
tccaaatgct gaagccctcc cttcaccag tgaagaggaa tcaacagaag aagaagatca 300  
agccacagag aagacccttg caccacgggc accagaacct actccaggtg acctcattga 360  
cctagaagag gtagaatctg atgaggaacc cattgccaac aagttggcac ctggcattgc 420  
agaaagacta caaagcagaa agggaaaaac ccccatcaag aggtctggac gaatcaaac 480

<210> 5193  
<211> 555  
<212> DNA  
<213> Glycine max

<400> 5193

ttcttgagaa accttccttg agaagcttct ttgagaaac ttccttgaga agctagagct 60  
tagctacaca caccctctc ataactaagc tcacctcctt gagaagcttc tttaagaaga 120  
ttcctaaaga agctagagct tagctacaca tacctctcta atagctaagc tcacctcctt 180  
gagatgagaa gctagagctt agctacacac cccctataat agctaagctc acccccatga 240  
caaaaaaac atgaaaatac aaaaaaagt cttactaca aagactactc aaaatgcccc 300  
gaaatacaag gctaaaaccc tatactatta gaatggccaa aatacaaggc ccaaacgaag 360  
aaaaaaccta ttctaattatt tacaagata agcgggtcat gcttagccca tgggctcgaa 420  
atctacccta aggctcatga gaaccttagg gccttcctt ggatctctag cccaatctac 480  
ttggagtctt ctaccaatg cccttgcaag ataggattgc atcacatgtc atgatagttt 540  
tgaaagcctc atttg 555

<210> 5194  
 <211> 521  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5194

agcttatggg tgaaggaata gctcgcccaa gcgagctggg tgcttaggcc tgaaggcatt 60  
 tcatggccta ngcgagccat atgctagcct gggcaagctt aggtccagaa aaatccacaa 120  
 aaggaccctt ttgccccctt tcccttgat ctttttgctt tcttgatcaa aactcggagt 180  
 gatccctggc ttgcgactgt aactagtgcc aaacaccgta attcaactag caatgatcaa 240  
 aacatcatat tgaatgatat ttcccggatg aaattagggg ctgacaactt gttatcatga 300  
 taacttttgc attgactttt tgttgatgaa tgaaattagt taaatgtgtt ttagaaaaaa 360  
 caagcttaaa tatgtttaag gtcactgata aatgactaaa ttttattttg ggtccctaata 420  
 aattattttg gtgttttaag tgtttgatat atttaaactt ttgttttgat tccctattgt 480  
 cagctaagtg atgatatgac accatcacaa tcgttaataa t 521

<210> 5195  
 <211> 615  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5195

tgagcttagc tacacatacc tgtctaatag ctaagctcac ctccctgaga tgagaagcta 60  
 gagcttagct gcacaccccc tataatagct acgctcacc ccatgacaaa aaacatgaaa 120  
 atacaaaaaa aaaagtactt actacaaaga ctacttaaaa tgccccgaaa tacaaggcta 180  
 aaaccctata ctactagaat ggccaaaata caaggcccag acgaaggaaa tacctattct 240  
 aatatttaca aagataaacg ggctcactat tagcccatgg gctcgaaatc taccctaagg 300  
 ctcatgagaa ccctaggggc ttcccttgga tctctagcca atctacttgg agtcttctac 360  
 ccaatgcctt tgcggggtag gattgcatca aaaccttctc attaccacc acccagtcac 420  
 ccacaaaggc catccctaaa atgaaccaca aagtgtacct accgcacttg caatgacaaa 480  
 caccaccttt agcataaacc aaaacaccaa ccaagatnat gaatttgcaa cgaagagcct 540

gtagaattca ccccaatttc agtgtcctat gctgacttgc tcccatactt acttgatatt 600  
 caatggatc ataac 615

<210> 5196  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5196

agctttgcct ctggttgctc tgctaggggtt ttcaagcatt agagagaagg agaagagatt 60  
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 ttaaattccca atgggtgggaa tatgtgaaaa tgagttttga acccgatgtc caaatttgaa 180  
 aatgatccaa cagttaatta gtctgtctatt atagttttat tggaatagat ttggatgtat 240  
 gtgggaaaaa gagaggattt tgggagaggg gaaggagaa cgaatttgtg aggaagacat 300  
 agcgtcaaca acagcagcct gctccttctt tccaaaatgc tgctggccca agcagacat 360  
 acattcctcc accaatccaa caacagcaac aacctcaaaa acagccaaca gttaaggccc 420  
 ctccacaacc ttccctcggn aaaattgttt cgcc 454

<210> 5197  
 <211> 457  
 <212> DNA  
 <213> Glycine max

<400> 5197

agcttagtga cttaagtgtc tccaaactgt aattgtagga gaagttgcct aagccatgta 60  
 attttgaatg cagcaacttc catggcatgg catttagctt cgatgctggg tctagcaact 120  
 atattttgct tcttacttct gcatgagaac aaatttcctt ccaagagtca gaggtagacc 180  
 tcctatctga tggatgacct acccaatcag catcagagta agaaacaatc ttgcgattgc 240  
 ctttgtcttc atgtaagagt ctacaacctg gtgcatactt gatatatcta aggattgata 300  
 tatctaagga tgcgcatgac agcatcccaa tggctatcac aaggggcatt gaggaattga 360  
 cttaccacac ttactgcaaa ggtgatgtct agtctagtga tagtgaggta attgagttta 420  
 ccaataagtc tgtgatattt tcccgggtca ttcagta 457

<210> 5198  
 <211> 632  
 <212> DNA  
 <213> Glycine max

<400> 5198

tggcaaaggt agtttttaggc ctgtatacag ggggtatgcg agctatgtgg ctattgataa 60  
 ttaagctcaa aatttggtat taaccacatt taattttctt tcccacaaat ttgggtgctaa 120  
 ggaaacacta caacatggac aagagatcgc tgctaagagg ctttcacaaa catctggaca 180  
 aggttttaaaa gaatttaaga atgaggttct gttatgtgcc aaacttcaac attgagatct 240  
 tgttaaagtt cttggatggt gcattcaaga agatgagaaa ttgctcagat atgaatatat 300  
 ggccaacaga agcttagact tctttctttt tggtagtct cataatcagc ttagaactgc 360  
 taatatttgg aacgatagaa gccgtgcttg gaaagcagac ggttaccaag cattgtctta 420  
 aagggggaaa aaacacacgt gtctttcgta catatataat ttacttttat cattttgcca 480  
 cttttccaac taaaataaag aaataataaa agattgtatt ggaatttgaa atctttgtat 540  
 tatttctgta ctatgttaat aaataattga actaaaaatc ttacattaat tttattctaa 600  
 attattaaat tctatgtttt ttcattcttt tc 632

<210> 5199  
 <211> 466  
 <212> DNA  
 <213> Glycine max

<400> 5199

agcttcttat tcaaggctca tcttggtggt gaagctcctt cttccatggc ttattcccta 60  
 gtggatggcg cctcctctca cctcttcttc tttgtcttcc actgcctctc catggtggaa 120  
 aatcaccatt aaagaacctc attgaagctc aaagatccag cctccataga tgccccacaa 180  
 gcaagcttcc atcaggacgt gtaatcctct gaaggtgagg gcatgtagcc ctctgaaggc 240  
 aaggatgtgt agtctcttaa aggcgagggc gtgtagccct ttaaagggtga gggcgtgtag 300  
 ccctccgaag gtgagggcgt gtagccctct gaaggcaagg gcatgtagcc ctctaaaggc 360  
 gagggcgtgc aacctctga aggcgagggc gtgcagccct ctgaaggcga gggcgtgcaa 420  
 ccctctgaag gcgtgggcgt gcagccctct gaaggcgagg acgtgt 466

<210> 5200  
 <211> 550  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5200

agcttgccctt gcccttgat atatttgagg gactcatggt cactatgaat gacaaattcc 60  
 ttgggataaa ggtagtggtg tcatgttttc aaagcccgtg ctaaggcata caactgctta 120  
 tcataagttg aatagttaag ggtaggacca ctttaactttt cactaaaata agcaattgga 180  
 tggccttctt gcatgaacac aaccccaatc ccaacattta aagcatcaca ctcaatttca 240  
 aaagattttt gaaagtttgg caacgcaagt atggggggcat tagttagctt ttgcttaaga 300  
 acattgaaag cttcttcttg tttctctccc catttgaaac caacattttt cttgagcact 360  
 tcattgagag gtgctgccag tgtgctaaaa tccttcataa atcgtctata aaaacttggt 420  
 aagccatgaa aactccgcac ctcggtcag gacttaggtg taggccattc ttgaatagcc 480  
 ctaaccttct cctcatcaac ttgcactcct tttgaactca caacanaacc aagaaacaca 540  
 acatgggttag 550

<210> 5201  
 <211> 569  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5201

tgaccctggt agaaaaatga agataatgag cttacaaggc ttaagctcta tagcttgagc 60  
 tcaacctttg aataaaaaata aagaaaagac tctagcaaaa ctttaagcatt agagcttaag 120  
 ctcgagccta taattaaaag aagaaaaatc acttacaagg ctttaactcg ggctcaaaga 180  
 aaaattaaga aaataggctt aagattgacc cttgaagaaa aatgaagaaa agactccgac 240  
 aaaacctaag ctttggagat taaactcgac cacacaagaa tgaagaaaat gaacttaca 300  
 ggcttaagct ttacaactta agcttgaact tgaagaaac atgaagaaaa gactttaaca 360  
 aggcttaagc tctatagcct aagtttgatc cttgaagaaa aatgaataaa ataggcttac 420  
 aaggcttaac ctctatagtt taagcttagg cctagaagaa aatgaagaa aataggctta 480  
 caaggcttaa gctttgtggc ttanacttga cctttgaaga aaaatgaaga aaatactctg 540



aaagaggtta agctntaggg cttaatctc

569

<210> 5202  
<211> 618  
<212> DNA  
<213> Glycine max

<400> 5202

agcttctttt gttaggtttt gcttacgttt atgagtgtat cgcgattttg tgcttctttt 60  
tgggttgctc ccgttggtcg acctttctgc tctattcat tctctctttt cttttctttc 120  
cggttactct tacattgtat ctgggttttt tatagcttct tttcttaggt tttgcttaca 180  
ttcatgattg tttatcaatt tttgttgcca ggttggtctc ctatccaggt gtcattctgc 240  
gattttgtgc ttcttttttg gttgcttttg ttgtccaggt ttgtatttcc ctcccagtgg 300  
ctaacctttc tgttttggtt tttgggtcct tttcattctc tctattcttc tggatctttc 360  
ttttgggttc ctctttaacc ttttttggtt aggttttgct aacgtctggt gctattttgt 420  
tctctatcc aggtctgaaa ctgtgatttt gttcgtcttt tccgtttgct tttgttgctc 480  
aggtttgaat tttcgtctcg gtgtctgacc tttctttttt gcattgggtc tctcattctc 540  
tgaaggttgt gggtttttaa aacgtctgct acatttggtc tatgcctcca ttgccgagcg 600  
attttatata taaaaaaaaa 618

<210> 5203  
<211> 462  
<212> DNA  
<213> Glycine max

<400> 5203

tcaacatcag accacttcca ggggtgctgga actacttcac atggacttga tggggcctat 60  
gcaagttgaa agccttggag gaaagaggta tgcctatggt gttgtggatg atttctccag 120  
attcacctgg gtcaacttta tcagagaaaa atcagacacc tttgaagtat tcaaggagtt 180  
gagtctaaga cttcaaagag aaaaagactg tgtgatcaag agaatcagga gtgaccatgg 240  
cagagagttt gaaaacagca agtttactga atactgcaca tctgaaggca tctactcatga 300  
gttctctgca gccattacac cacagcaaaa tggcatagtt gaaaggaaaa acaggacttt 360  
gcaagaggct gctaggggtc tgcttcatgc caaagaactt ccctataatc tctggggtga 420

agccatgaac acagcatgct atatccacaa cagagtcaca ct

462

<210> 5204  
<211> 582  
<212> DNA  
<213> Glycine max

<400> 5204

agcttggttaa gtattaagtg gttatttaag cacgggtact tgacatgtgt gtagggttca 60  
acaagtaaca tttatatatt agaacagtta aaataaaata tatttatgaa tgacatgaaa 120  
aaataagcaa tatacaatga cgaattcatt taagatgtgt aaaaaattta aaagagagat 180  
attaagcgca tgtttgcttt agactcatat ttatctctag ttatttgatg tgattttcca 240  
cgtggattcg tgaatccaaa catagtctaa gagaataata ttacttaatt gtaagaggta 300  
aaaatcattt gtataatagt aagatttatt taagacatct aaaaagtgga aagaaattta 360  
ataagatgaa gatagcctaa agacatctca aaatatgtgt ttattttgtc atttcttatt 420  
tagtactagt gtgtaataat ttttttttaa aaaaaacaa tagaacttat taaacactca 480  
taaaaaatat gcttacataa gtctttctct aacagtagag tcttaaaaaa tttgtgggtt 540  
cttcatagac tattaacat catataaatg tgagatgaag tt 582

<210> 5205  
<211> 405  
<212> DNA  
<213> Glycine max

<400> 5205

tctgttttca attttgagcg tctagatata ttacgggtat caatcggaca tccgagcaaa 60  
aagttattgt catttgaatt ttgtgtattc attttttagc atcaagaatt attaaatgac 120  
tcaatcggac atccgagtaa aaagatattg tcgattgaat ttgctgacag cttgtgtatt 180  
caatttcgag agtctcgaat tattaatga ctcaatcga catccgagta aaaagttatt 240  
gacatttgaa ttctcttaga gcttctgatt tcaatttcga gcatctagaa ttattagagg 300  
actcagtcgg acatcccagt aaatagatat ggatcattga atttgcttaa agatactggt 360  
ctaaatttcg tgcgtctoga tatactatag gactcaatcg gactt 405

<210> 5206  
 <211> 627  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5206

agctttatat ggacgaaagt gcaaaagtcc tatttggttg tatgatgatg gagaagcagt 60  
 actttcttggga cctgaaatgc tacaacaaat taacgaacaa gtgaagttga ttcgagagaa 120  
 gataaaagca tctcaggata ggcagaagag ctattatgat agaaggagga agccactaga 180  
 ttttcaggaa ggagaacatg tgtttatgaa ggtttctccc gtaaccggag tcggaagagc 240  
 tcttaaggct aggaagttga cacccaagta tctaggtccg tatcagattt tgaagaagat 300  
 tgggectgta gctaggaatt gccacagct ccagcagacg acaataactt ttaactcgaa 360  
 tgttcgatta agtcacgtaa tatatcaaga cactagaaac tgaaaacgca agctcgtagc 420  
 aaattcaaac gataataact tttaactcgg aggttggatt gagtcccgga atatatcgag 480  
 acgctcgtaa ttgaaaacgg aagctcgtag canatgcaaa cgacaatana cttgaactcg 540  
 gatgttcgat tgaatcccgg tatatatcga gacgctcgaa attgagtata gaagctcaga 600  
 gcaaatgcaa cgacaataaa ttttact 627

<210> 5207  
 <211> 640  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5207

tggttcccaa cgctctgttc aagctctccc aaaatctaga ggtaaactta ggatctctat 60  
 cagatactat gctagatggc acaccatgta acctgacaac ctcacttata tacaaggtgg 120  
 tcaacttttc caaggaaaat cttatattaa tgggaatgaa gtgagcagac ttagtcaatc 180  
 tatcaacaat aatccagata gaatctaaac ctctaggggt tctaggtagt cctaccacaa 240  
 aatccatgga aatattgtcc cacttccact ggggtatctc taagggttgt aacatccctg 300  
 aaggtctctg atgttctatc ttagcctttt gacagactag gcatgcatac acaaactcac 360  
 taacctctct cttcatgttg ggccaccaa acatcgtctt taaatcatga tacatcttgg 420  
 tagcaccagc atggatgctc anattattcc tatgtccttc ctctaagatc atcttccctaa 480

gttcaggcac attggaaca caaatcctat cttggagtct tcaaactcca tctgatccaa 540  
tattgaaact actgtccttt cctgactcta tagcctctaa ctgagtcctt agaaaaggat 600  
caatcttctg acctttcctg atatcaccta gtaactcact 640

<210> 5208  
<211> 527  
<212> DNA  
<213> Glycine max

<400> 5208

agcttgaaga gatcttcaat ggctacgaac aacaacgcat ttcattttgc ttcttctttc 60  
cccaattaca tatcacataa agtagaagat tcaagctttc ttttatggcg tcaactagtt 120  
aagcctatta tcaaatcaaa caaacttcaa tgattcattg ctaatccgca aattccactt 180  
tgattttctt ttaaagaaga tcatgaagtt ggacgtgaaa atccagtta tgaggcatgg 240  
gagtagcaaa attaggtgtt attaactctgg cttcaatcca ttctttctac actgattttt 300  
tctcatgtaa tcggttataa tcaactcctat gaagtctagg agcacatcca tgattacttc 360  
cacaagcaga gcatcgccac aacgcgtcag ttgcacattc aacttcgagc aatgaaactt 420  
ggaagcaagt tgatgcaata gtttctatct caaatcaagg tactcgctga tgctcttgct 480  
tcattaggaa gccctataat gattcaagag ctcgttgatt caattct 527

<210> 5209  
<211> 583  
<212> DNA  
<213> Glycine max

<400> 5209

agcttctttt agaaaacttc cttgagaatc tagagcttag ctacacacac ccatctaaaa 60  
actaagctca cctccttgag aagcttcctt gagaagctag agcttagcta cacacacccc 120  
tctaataact aagctcacct ccttgagaag agaagctaga gcttagctac acaccctat 180  
aatagctaag ctcacctcca tgacaaaata gatgaaaata caaaaaaaaa gtccctacta 240  
caaatactac tcaaatgct atgcacacac atgacctcta tttatagcct aagtgtcaca 300  
caaaattgaa gggaaatttg aatttcaatt caaatctcac ttgaatttga aattgaattt 360  
gtggagccaa actttggagc ctaaatttca ctaattatga ttagtgaatt ttagttatgg 420

ttcatccac taatccaaga tcaattccaa gatttccaac taagtgtgct taggtgtcat 480  
gagggcatgta aagcatgaag gacatgcaca aagtgtgact atatgatgtg gccatggggg 540  
gtagtaagca aatgctcacc ctcccccttct aaaattaatt gga 583

<210> 5210  
<211> 365  
<212> DNA  
<213> Glycine max

<400> 5210

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aagttattgt ggtttgcatt tgctacgagc ttctattttt aattacgagc ctctcgatgt 120  
attataggac tcaatcgaac atctgagtaa aaatttattg tcttttgaat ttccaacgag 180  
cttttatttt caattacgag cgtctccata tattatggga tacgatcgga catccgagta 240  
aaaatgtatt ggcttttgaa ttactacga gcttccgttt tcgattgcta gcatctcgag 300  
atactacagg acaccattgg acattcgagt aaaaatttat tgtgcgttga atttgctcag 360  
aattt 365

<210> 5211  
<211> 442  
<212> DNA  
<213> Glycine max

<400> 5211

agcttcaacc aaggggagat ggaccatttt ctagtgttg aaagaatcaa tgacaatgct 60  
tacaaagttg agctgcccgg tgagtataat gttagttcca cttcaatgt ctctgattta 120  
tctctttttg atgcagatgg agaatccgat ttgaggacaa atccttctca agagggagag 180  
aatgatgagg acatgaccaa gaacaagggc aaggatccac ttgaaggact tggaggacct 240  
attgatgagg acatgaccaa gagcaagggc aaggatccac ttgaaggact tggaggacct 300  
atgacaaggg ctagagcaag gaaagccaag gacgctcttt aacaagtgtg gtccatacta 360  
tttgaataca atgccaagtt tcaaggagaa aagtccaagg ttgtgagttg tatcatggcc 420  
ccaatggagg acttaatgac ac 442

<210> 5212  
 <211> 478  
 <212> DNA  
 <213> Glycine max

<400> 5212

agcttcccg ccaatggtatt tgaagtttaa tgataccatt gttttctttg aatttaagga 60  
 aaatactgtt gatcgggtga tatatctgaa tgtcagtggg agtaagggtta tttttttaat 120  
 cctatatgtt gatgatatat tgcttgcaat taatgatctt tgtaatatcc cattttttgt 180  
 aaactaattt aaaaagaatt tttatttata aataaataga gtttttagaaa aatgatgagg 240  
 tttttgtaaa taaataaata atgagaaata atgatttgaa ggaaaaaaaa aagaaaagat 300  
 atttgattta ttcatttgat aggggaataaa atagagttcc tttttataaa atattaaaaa 360  
 taaataaata gagtaataat aagttgtgta taccacaggt ataaatagtt ctgttaagtc 420  
 aaatttcaga ctgacgatgc ctcatctttt cctcaatttc ggttttcttt attctcct 478

<210> 5213  
 <211> 581  
 <212> DNA  
 <213> Glycine max

<400> 5213

agcttatgct gcaaataattt acaatagacc tcctcaacct cagcagcaaa atcaaccaca 60  
 gcaaagcaat tatgacctct ccagcaacag atacaacctt ggatggagga atcacccata 120  
 cctcagatgg tccagccctc agcaacaaca acagcagcct gtccttcct tccaaaatgc 180  
 tgctggccca agcagaccat acattcctcc accaatccaa caacagcaac aaccccagaa 240  
 acagccaata gttgagggcc ctccacaacc ttccctcgaa gaacttctga ggcaaatgat 300  
 tatgcagaac atgcagtttc aacaagagac cagagcctcc attcagagct taaccaatca 360  
 gatgggacaa ttggctaccc aattgaatca acaacagtcc cagaattcta acaagctacc 420  
 ttctcaagct gtcccaaata ccaaaaatgt cagtgccttt tcattgaggt cgggaaagca 480  
 atgtcaagga cctcaccctg tacacctttc ttatctgaaa tgaacctgcc aaacttcact 540  
 ctactccaga aaaaggtgat gaccaaatt tacctaacaa t 581

<210> 5214  
 <211> 533

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5214

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attgcatcca gcagaggtat gtttacctct actttttctga atgtttccaa gatctttttc 120  
tctgcctctt ccattttttt gttggaaact gctcttggag ggaatggaag aggagggatg 180  
tggtgcttct gcaaatacaga attaccagtg gaagattcac ctgcacataa attgtttaggt 240  
aaatttttgt cattaccttt ttctgggtta gagtgaagtt gggcaggttc atttgcagat 300  
gaggaagggtg ctacgggttg aggtccttga cactgctttc ccgacctcaa tgaaatggca 360  
ctgacatttt tgggattttg gacagcttga gaaggcagct tgtcagaatt ctgggactat 420  
ttttgattca attgtgtagc caattgtccc atctgattgg ttaaagcttt aatggaggct 480  
ctgggtctctn tgtgaaactg catgttctgc atagtcattt tgcctcaaaa ttc 533

<210> 5215  
<211> 475  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5215

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tgcacgtgtg cctgttgacg attgcttcac ggacttcacg atctattgcc tgtaaaaaaga 120  
aatactttac ctttaagacc ttcaactcct gctcctcgat caattagcat tgcgccttcg 180  
cacgctctat tccatctacc accatctata tccattctc aatgagatcc caagatcctt 240  
ggagtggaga aaatacttca tcaacattgc ccagtggcta taaagaccat taaaccttcg 300  
gattgcaagc tgcacaatac tgctactccc acctgctgct attgaaatga actcgttcta 360  
ctcgaaagat agaaaaactg cagtttcggt cttgactcgc actcattgtt gttgtcacac 420  
actcactgct ntccctcacgt gcactcaata tcaagcgcct actgaggatc tctga 475

<210> 5216  
<211> 609  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5216

agcttcatgc ttaagtatgt atggcaaaac ttcattaatg ttgttcaaga catacaagtg 60  
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accactctg tcatcatgcc gagactcagg aaggccaaca ggtttagcct tctctaagta 180  
ttctgaacaa aattcaatgg cttcttctgc aatgtacctc tcaacaatag atgcttttgg 240  
acgatataga ttctttgtat acccttttaa gatcttcatg tatcgctcaa ccgggtacat 300  
ccaccgtaga taaacaggac cacaacattt gatttctctg accagatgca caatcaagtg 360  
aatcatgatg tcaaagaaag caaggggaaa atacatctca aactggcaca gtataattgt 420  
ggcctcattt tccaactcat caaacttgac aggatcaatg actntgctac atatagcatg 480  
gaagaaaaag cacaggtgag ttatcgctaa cctgactttg tttggcaaga tgtctcgtat 540  
agctacgact aacaattgtt gcatgagcac gtgacaatca tgagacttta accctacaag 600  
cttaagctc 609

<210> 5217  
<211> 605  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5217

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taagcaaaaa attagtgggtg caagcgagaa aacacgtttc aaacttgatt agaatggctt 120  
ccaaatggaa ttcaattaga attgtcactg ttatgtgagg atcatttcca ttgtttaaga 180  
tatctatgat ttgaagaaga gaattatttt ttatattgta agactttaaa gggaaaattg 240  
atatttaata tacctttgtc ttcaagtttc tatttaccta taaaggggag aaatgactat 300  
tttattgttg attaagacac ttatagtatt tgttgagaaa tattttttgt tgtaagacg 360  
aaatcatttt gaaaagataa tgatgatgta ttgattgatc acttgtagtt tagtattttt 420  
ctattcttct tagctcaatt aacatctctt tgagccttat tttctcactt taacttagtt 480  
ttggctcttag acaaatgaat gagcttaatt gataattatg gcttattttc atatttttgt 540  
gcttacttga cctatttggg tttgcangga ctatngata ctacaaagat gaaatggatc 600



gtgtg

605

<210> 5218  
<211> 722  
<212> DNA  
<213> Glycine max  
  
<400> 5218

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tagtattaac taagcatgat ttgatttcca ttgtttgtgg gtgggtttat gacgggtggag 120  
gaatggaagg agaagtggac aacattgata ttacagacag aaaacatagg gattcctgaa 180  
tcttctccac cttacatcca tcaatgtgat catgctgtct ttgtattacc tcccaaaaaa 240  
taaaaagcaa ataaaatcta cttaaatttg tgaagtagaa caactaacta taagataaac 300  
aacaacgtgc ttgctaacgt attaaaatat aatcaattta attagaatgt attcttttct 360  
tttatataat aataataata ttaatgcatt tggttaatttt tttagtattt aaaatttatt 420  
aaaaatataa ataaataaga gataataatc ataccatttg gtgattaaat ttcaatcaat 480  
aaaaaaatgt attttaaata ggggggtttt tatattctct atcatttata ataactgctt 540  
tttatacctc aattacctt tattagttaa taatgtaa atgttttacac taccaataca 600  
taaagtaaaa aatttcttga tatatttttag aattaattac attgttatca tcttctaatt 660  
aatttttaaa tttattggat catcttatta tttaaaaatt aattaggtct atgttttta 720  
aa 722

<210> 5219  
<211> 595  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5219

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tggcatcatt tctggcgcta aactgctgag agttggaggc catcttctca attaaattta 120  
tggcttcagc aggagtcatg tctccaaggg ctccaccact ggcagcatct atcatacttc 180  
tctccatatt actgagtcct tcataaaaaat attggagaag aagctgttct gaaatctgat 240

ggtgagggca actggcacat agttttcttaa atcgctccca gtactcatac aggctctctc 300  
 cactgagctg tctaatacct gagatatctt tcttgatggc tgtggtcctg gaagcacgga 360  
 aaatTTTTTc taagaatact ctcttaaggt cateccagct cgtgatggac cttggagcaa 420  
 ggtaatacaa ccagtccttt gccactccct ctaatgaatg aggaaaagcc ttcagaaata 480  
 tgtgacctc ttggacatct ggnggtttca tgggtggagca gacaatatga aactcctttc 540  
 aatgattgtg cgggtcttca cctgcaagge catgaaactt tggaagcaca tgaat 595

<210> 5220  
 <211> 508  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5220

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 gtgaagaaga atgtggcatt tacctggggg gaaaaacaag agcaagcctt tgctttgctc 120  
 aaagaaaagc ttactaagge acctgttcta gctcttctg agttttctaa aacttttgaa 180  
 ctagaatgtg atgcctctgg agttggagtt ggagttgtat tgtaacaagg tggacaccct 240  
 attacttatt ttagtgaaaa acttcatggt gccaccctca accacccac atatgataaa 300  
 atgctttatg ccttaataag agccatccaa acttggaac attaccttgt ttccaaggaa 360  
 tttgttattc atagtgatca tcaatcactt aagtacatta gagggcaaag caagttaaac 420  
 aaaaggcatg caaatgggt aaagtaccta gagcaattcc atatgttatc anatacaaaa 480  
 ggggaaaaca aatgtggagc taatgccc 508

<210> 5221  
 <211> 540  
 <212> DNA  
 <213> Glycine max

<400> 5221

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 aatcattgga ggacctttta agagcgtgtg tcttaaagca gaaggggaagc tgggagagtt 120  
 ttcttccatt gatagagttc acttataata acagttttca ctctaccatt ggcattggctc 180  
 cctatgaagc tttgtatggt agaaggtgta ggacaccctc atgttggtta gagcccgag 240

aaggccttac cttagatcgg aagtggtaaa ccaaccacag agaagatcaa gttgatccaa 300  
gaaaggatga ggactgctca gagtaggcag aaaagttatc atgataagag gaggaagggg 360  
ttggaattca aggttggtga tcatgtattc ttgagagtca ctctgtggac tggggttggt 420  
caagcattga aatcccgaaa actcacacct cgctttattg gtcctttccc aattcttaag 480  
agagttggcc ctgtggcata ccaaaaggcc ttacccccgt ctctttctaa tcttcacaac 540

<210> 5222  
<211> 485  
<212> DNA  
<213> Glycine max

<400> 5222

tgaaggcaaa ctggatgcgt tgggtcaactt ggtaaccacag ctggccttga atcagaaatc 60  
tgtacctgtc gcaaggggtt gtggtttgtg ctctctgtct gaccaccata cagacctttg 120  
cccttccatg cagcaacctg gagcaattga gcaacctgaa gcttatgtct caaatattta 180  
taatagacct cctcaacctc agcagaaaaa tcaaccacag cagagcaatt atgacctttc 240  
cagcaacaga tacaacctg gatggaggaa tcaccctaac ctcatatggt ccagccctca 300  
gcaacaacaa cagcagcctg ctcttctctt ccaaaatgct gctggcccaa gcagaccata 360  
cattctctca ccaatccaac aacagcaaca accccagaaa caaccaacag ttgaggcccc 420  
tccacaacct tccctcgaag aacttgtgag gcaaatgact atgcagaaca tgcagtttca 480  
gcaag 485

<210> 5223  
<211> 561  
<212> DNA  
<213> Glycine max

<400> 5223

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tggcatcatt tctggcgcta aactgctgag agttggaggc catcttctca attaaattta 120  
tggcttcagc aggagtcatg tctccaaggg ctccaccact ggcagcatct atcatacttc 180  
tctccatatt actgagtcct tcataaaaaat attggagaag aagctgttct gaaatctgat 240  
ggtaggggca actggcacat agtttcttaa atcgctccca gtactcatatc aggctctctc 300

cactgagctg tctaatacct gagatatctt tcctgatggc tgtggtcctg gaagcagggga 360  
 aaatTTTTTc taagaatact ctcttaaggt catcccagct cgtgatggac cttggagcaa 420  
 ggtaatacaa ccagtccttt gccactccct ctaatgaatg aggaaaagcc ttcagaaata 480  
 tgtgatcctc tttgacatct ggggggtttca tgggtggagca gacaatatga aattccttca 540  
 aatgtttgtg cgggtcttca c 561

<210> 5224  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<400> 5224

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 aaaagctact agcaggacaa gaagatactg tgtccgatgg gtatggagta tcagaagatt 120  
 catgcttgcc caaatgatga ggactgcaat tctaataagg catgaattca aagaaatgtc 180  
 caaatgcctt tgggtgcgagg catcatggta caaggtgaag gatgatgagg actacagttc 240  
 taataaaaaac tcaaagaagg gccctctaga gaaggtgttg tggatatctc ccatcattcc 300  
 aaggtttaag cgtcttttta ctaatggaga cgatgcaaaa gaccttattt ggcatgcaaa 360  
 tgggagaaaac tctgatggaa tgggtccgtca ttcgactgat tgctcgagc ggaagaagat 420  
 tgatgggttg tatt 434

<210> 5225  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<400> 5225

agcttgaagg caaactggat gcattgggta acttggtaac ccagctggcc ttgaacaaaa 60  
 aatctgtacc tgttgcaagg gtttgtggtt tgtgctcttc tgctgaccac catacagacc 120  
 tttgcccttc catgtagcaa cctggagcaa ttgagcagcc tgaagcttat gctgcaaata 180  
 tttacaatag acctcctcaa cctcagcagc aaaatcaacc acagcagaac aattatgacc 240  
 tctccagcaa cagatacaac cctggatgga ggaatcacc taacctcaga tgggtccagcc 300  
 ctcagcaaca acaacagcag cctgctcctt ccttccaaaa tgctgctggc ccaagcagac 360

catacattcc tccaccaatc caacaacagc aacaacccca aaaa

404

<210> 5226  
<211> 612  
<212> DNA  
<213> Glycine max

<400> 5226

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ttttaaaaag gggaatgggc atttaaaaaa atgttctaaa aattttattta aaaacaaaat 120  
ttgtaataat atattctaata taaataaaat gacaactcta aaacaagata ataaatctaa 180  
atttaaagtt aagacagaag gtgtgtaatc atttaaataa attaataaat atataatttc 240  
aaagtattgt gataaaatac taaaataaca gcaataatgg tatttatgta gataatgtaa 300  
tttattaaat ataaaataat ttttgaataa cttcaaattt aaccataata attagttttt 360  
tttaaataaa aaaaaaacct aattttattta attactctaa aaaacctaata ttatcatggt 420  
agtataaaca ctatagaaac atttaacacg tcccataatc tttattatga aagtattttg 480  
gaaagcataa aaacagaaac agaactataa tataaactat ctatagcata atcttattac 540  
aaatttgtca aaattaacaa aattataatc tttgatgata taccacagat catagatgaa 600  
ttaaataaaa ct 612

<210> 5227  
<211> 552  
<212> DNA  
<213> Glycine max

<400> 5227

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aagcgttatc agttctacca ttaaagagtt tcgtaatggg tgtccacctt gcccataaa 120  
gctcgcaagc cacaagttgc tctcatcttc cttttttgta aagggaattt tgtaagttg 180  
agaatcaaga tgattgtgcc acctaaattt gtagctttta cctagacaaa agtaatgaaa 240  
accattatt caaaatacat tacaaaaata aaattagaac ataaggtact acaatataat 300  
atatatatat atatatatat atatatatat atatatatat atatatatat 360  
attaatcttc tataccaaag caatggtttc gtagtactat tatctcattt gtaaactctc 420

tctagtgaac taagaacaac acgaacatga ttctaactaa ataatcatac ataagttgat 480  
 tatgattaaa tataaataaa atatccaagc tccgatgtca aatctatcaa agatatacaa 540  
 accccaacca at 552

<210> 5228  
 <211> 460  
 <212> DNA  
 <213> Glycine max

<400> 5228

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 caatttcgag cctctcgaca tattatgccc ccgaatcgga catctgtgtg aaaagttatg 120  
 atcatttgaa tttctccaga ggttccgatg ttttaatttcg agcgtctcga tatattataa 180  
 ccctgaatcg gacctccctg tgaaaagtta tgaccatttg aatttgacga gagcttccgt 240  
 tgggtcaattt cgagtgttcc tgtatgtgat gcgcccacaa tggacattcg agttaaagt 300  
 tctgaccatt tgaatttctc aagagcttcc gttgttcaat tctgagcgtc tcgatatgtg 360  
 atttgctga atcggacatc cgggtgaaaa ggtatgtcca tttgaatttc tcaagagctt 420  
 ccgttggtca atttcgagcc tctttacata attatgcgcc 460

<210> 5229  
 <211> 522  
 <212> DNA  
 <213> Glycine max

<400> 5229

tctagaagct gggcttatct accccatttc ccatattgct tatgtaagcc cagttcaggt 60  
 ggtactaaag aaaggggcat gacagtcatt tgaaatgaaa agaattgacct aatcccaacg 120  
 aggaatgcca ctagctggag aatgtgcacg gattaccgca agctcaatga agccacaagg 180  
 aaatatcatt ttcctttgcc tttcatggac cagatgttgg agaggcttgt gggacatgct 240  
 tattactgct tcttggatgg atactttggg tacaatcaga ttgttgtgga cccaaggat 300  
 aaggaaaaga tgaccttcac atgccctttt ggtgtctttg cctatagacg gatgtcattt 360  
 gggctatgta atgcacctgc cacattttag aggtgcatat tggccatttt tgcagatatg 420  
 gtggagaaaa gtattgaggt attcatggac aacttctcgg tatttacttg ttgatagctt 480

tggcaagcat accaactgtc gttgtacgtt tcacatttat aa

522

<210> 5230

<211> 584

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5230

tctcaaagct atgttatagg cgctctgata agagcatcac ccttgttcat aacagcctca 60

aattagtagc tttgtggtgc atccttgctg cttacgtaac accattcttt atcattcctc 120

acacggttca ccctcttctg ggttggtacc tgtatttgc tgcactttt gcactttgct 180

caattgcaat caatatcttt atgctaccaa tgttaccagt tttggtacca tggcttgga 240

ttgttgggt ccttatgggc atggcatttc cttggtatcc tgatggggta gtgagagcac 300

tgtttgcctt tgcctatgcc ttctgctctg caccattttt gtgggcctct atggtgagga 360

tagttcaagg tcttcagtta tctctataaa gggaagcttt tctgccagca agattgngag 420

agtcttcgcc aaattcatgg ttttaacaagt tatattgagc tgtctagttg ggcacaccaa 480

tacaaggctg ggacaaagag ggaccttctt ggcaagctca gccaacatag aaggagcat 540

gatacattaa ataccaaaca tgcccagtag gcttcacaat gaat 584

<210> 5231

<211> 361

<212> DNA

<213> Glycine max

<400> 5231

agcttccaag agttgaagag gcgattgaca acagcttcag tgttaatttt gcccgaccct 60

aagataccat ttgaagtgtg ttgcgatgca agcgggcaag gcttgggggtg tgtgttaatg 120

caagagggaa gagtagtggc ttatgcttca cgccaattgc gtcctcatga agttaactat 180

ccgacccatg atttggaact agcagttgtg gtctttgcct taaagatttg gaggcattat 240

ttatacggtg ctcgttttga agttttcagt gatcataaga gtctcaaata cttgtttgat 300

cagaaggaac tcaatatgag gcaacaaaga tggatggagt tcctcaagga ttatgatttt 360

g 361

<210> 5232  
 <211> 462  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5232

agcttaagtg tgattccttt ctttttctta tcattctcct catgttgatt cagtctcatt 60  
 agttccattt cgtgttccta taactntcca aataaagttg caagagacat gttagaaaga 120  
 tcccttgatt ctgtaatagt tggtagcttt ggctgtcatt ccctacttaa acatcttaga 180  
 actttattaa taagatcctc attgngaaat atctttccta atgatgcaag atgatttact 240  
 atgtgtgtga atctcttttg catatcatgt atagtttcat tttggatcaa tctacacaat 300  
 tcatattcat gggtaaggt atttattcta gacctctnta catctattgt tccttcatgg 360  
 ggtactngta anggatccca catatctttt gcactctgca attngtactc taaagattca 420  
 tccattccta aggagatgta attatatttg gctctaaata ta 462

<210> 5233  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5233

tgtagaactg tccaatatcg cgaagtgaac ctcgatccc tgtctgatac aatactggaa 60  
 gggaattcat gcaaccttac cacttctttg atatacaact ccactagctn nttccattta 120  
 tacttcatat tcaccggaat aanatgagca gaatcggtaa gtcgatctac ataatacagcc 180  
 acattcttct tcatgccatg ccacaaaaaa cttctcttca aatcttggtta cattctagtc 240  
 attccaggat ggaaactaag acgacttnta tgcgcttctt ccaagatctt aactttcaaa 300  
 tcactctaaag atgacacgca tatecttccc ttgaatctaa ttaacccggg tgtgtccttc 360  
 tcanactctn acatccttat cccattaca 390

<210> 5234  
 <211> 302  
 <212> DNA  
 <213> Glycine max



<223> unsure at all n locations  
<400> 5234

tggagctgac ccatcaactg ccctagctct tttatactgg tgattcctan gctcttgacc 60  
ttgacttgat agaacctctt tntaagcgaa gtcatttgac ttgatcccat gttntactaa 120  
agtgaacaaa attggtgcga atcanaactc tgacatctat catgggtgga atggatgaat 180  
gcatgaagtg gtagtgctta tctctacccg agttttaaag attggctcag aatttgtaaa 240  
acataagcac ttatacaatg aaggaaagct ggagttgctg cacatgatgt ccaacgttat 300  
gt 302

<210> 5235  
<211> 247  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5235

cctggagcaa atgagcagcc cgaagcttat gttgcaaaca tttacaatag accctcctca 60  
cctcagcaag caaatcaacc acaacagAAC aattatgacc tcttcagcaa cagatacaac 120  
cctggatgga ggaatcaccC taatctcaga tggcttagcc ctCagcaaca acaacagcag 180  
cctgctcctt cctcanaaat gttgtggccc aagcatacat acatttctca caatccacaa 240  
cagcaca 247

<210> 5236  
<211> 308  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5236

gcttctcgat atattatgca cctgaatcag acttccgttt gataagttat gaccatttga 60  
atntctcgag agctntcgtg gttcaatttc aagcttctcg atatattatg cacctgaatc 120  
ggacttccgt gtgacaagtt atgaccatnt taatttctcg agaacattcg ttgttcaatt 180  
tcgagcgtct cgatatatta tgcatttgaa tcggacttcc gtgtgataag ttatgaccat 240  
ttgaatttct cgagagcttn ncgttggttca attcaagctt ctcgatatat tatgcacctg 300  
aatcagac 308

<210> 5237  
 <211> 363  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5237

agctntngag caattcanat ggacattact tntctcatgg atgttatatn tatgcgcata 60  
 atatatcgag acgctcaaaa ttgaacaacg gaagctctcg agaaattcaa atggtcataa 120  
 cctttcactc ggaggttcga ttcatgcgca taatatatcg agacactcga aattgaacaa 180  
 cggaagctct cgagaaattc aaatgggtcat tacttntcac tcggaggtcc gactcangcg 240  
 cataatatat cgatacgctc ganattgaac aattgaagct ctttagcaat tcaaattggtc 300  
 ataacttntt ccctcggagg tctaattcac gcgcataata tatctacacg cacaaaattg 360  
 aac 363

<210> 5238  
 <211> 310  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5238

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 atgggtatctc ttgactttc ctccatagac ttcaattgat ggccaagtaa ccgcctaate 120  
 atcaacaatt ctcccttcga tgttttctcc acttgcttct cagcatcctc actctcttct 180  
 tccttntcaa cttcggaatc actaatgcac tcttcgtctc taagaatcat ggcatcttat 240  
 gtaaggcact catatgcata atgatccaag ccatggcacc gaaaacactt cacatcttga 300  
 cttttttatt 310

<210> 5239  
 <211> 335  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5239

tatgaagatg tagcatccta cagaagattg natgggaaac ttctgtactt gaacaacact 60  
aggcctgaca tcacatntgc cactcaacaa cttagtcatt tcttaagtaa acctagtatg 120  
acacactaca atgctgcctg taggggttga agtacctcan aggcagtcct ggccgaggcc 180  
tggttcttccc aagaaagcca gaaatccagc tactangaat ttctgatgtt gattgggggtg 240  
gttgcttaga ttcaaggagg tccatttcag gatattgctt cttcttgnga gcatctttga 300  
tctcttgag agctaagaag cagcaaacag tctca 335

<210> 5240  
<211> 347  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5240

tgcagcttga gcanattana cgacaaaact ttatctnccg agttcgattg tgtccccgtag 60  
natatcgaga cgctcgaaat tggaaacaga agcactgagc aaattcaaac gacaataact 120  
ttntactcng atgaccgatt gagtcccgta atatatcgag acgctcgtaa ttgaaacaga 180  
agctctgagc caattcaaac gacaatatac tttaactcgg gtgtccgatg gtgtctcgta 240  
gtatatcgac acgctcgtaa ttgaaaccgg aagctctaag aaaattcana cgacaataac 300  
ctttgactcg gatgtccgat tgagtcctat aatatatcga gacgctc 347

<210> 5241  
<211> 345  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5241

agctnntgag caaattaaat gacaataact ntatacacgg atgttctggt gagncccgta 60  
atatatcgag aacgctccaa tatgaaacgg aaactcttat aaatatcata cgacaataac 120  
ttntacttg gatgcccagc agagtgtcgt aatttatcga gggatgctcc aaattgaata 180  
cggaagctcg taccaaactc aaacgttaat aacgttttac taggatgtct gattgagtcc 240  
cgtaatatat cgagacgctc acaatttaga tccgaagctc tgagaaaatt gaatagacaa 300  
taactttata catggatgtc ccggtgagtc ctgtattata tcgag 345

<210> 5242  
 <211> 271  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5242  
  
 cggtagaatt caatgaatgt ccttttaagt ggggcctcta tcttgntctt attttttctg 60  
 ctgaaaacaa ctagctctgt attgctatgg aaactgagaa caccttttat agtcgaacgt 120  
 ggagttacat agntgtgtgt gaaatgcact cgatcaagta tttccaaacg ggctgggtcta 180  
 gtcaccctgg tattctttgg cttctctgcc tcaacttttg ggtttacact ggtctgatta 240  
 tctgattggt cattatgact gttgctctct t 271

<210> 5243  
 <211> 352  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5243  
  
 ctgcagctat gctganatat tacaatagac cttctcaacc tcattatcat atcaaccaca 60  
 gcagaacaat tatgaccctc tcagcaacag atacaacccc ggatggagga atcacccctaa 120  
 cctcagatgg tccaaccctc agcaacaaca acaacagctt actcctttct ttcaaaatgt 180  
 tgctggccca agcagaccat acattcctcc accaatccaa caacagcaac aaccccgaa 240  
 acagccaaca agtgaggccc ctccacaacc ttccctcgaa gaactngtga ggcaaagac 300  
 tatgcagaac atgcagtttc agcaagagac cagagccttc attctgagct ta 352

<210> 5244  
 <211> 370  
 <212> DNA  
 <213> Glycine max  
  
 <400> 5244  
  
 agcttcacta ccaacaaatg cttgtgctca tgctcaattg gaagacaaca aacttaccat 60  
 aaaccaatca aaaggagagac attatcagag gtttgtaagc tatgcagtaa ctgcataaag 120  
 catcaccaag cttcaaggac caatcttttc ttaatcaaaa aataatcttt tcaagaatgg 180

cctagatctc tctataagag acttccactt gacctcttgt ctgaagatgg tcatgtgtag 240  
 cgtgagcgac tccatacatc ttcaatataa attcaatctg cctctcaatg aaatgagaac 300  
 caccattact aatcacagat cgtgggaccc ccaacattgg tgaaattatc tacttgaaca 360  
 gctggatcac 370

<210> 5245  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5245

ttaacatcag accacttcca gggacttgga actacttcac atggacttga tggggcctat 60  
 gcagttgaaa agcctggagg aaagaggtat gcctatgttg ttgtggatga tttctccaga 120  
 tttacctggg tcaactttat cagagagaaa tcagacacct ttgaagtatt caaagagttg 180  
 agtctaagac ttcaaagaga aaaagactgt gtcacatga gaattaggag tgaccatggc 240  
 agagagtttg aaaacagcaa gtttactgaa ttctgcacgt ctgaaggcat cactcatgag 300  
 ttctctgcag ccattacacc acaacaaaat ggcatagttg aaaggaaaaa caggactttg 360  
 caagaagctg ctanggtcat gcttcatgcc aaagaacttc cctataatct cttggctgaa 420  
 gccatgaaca cagcatgc 438

<210> 5246  
 <211> 502  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5246

ttgagcaaat tcaaacgaca ataacttttt actcggatgt ctgattgagt cccgtaatat 60  
 atggagacgc tcgaaattga atgttgaagc tttgagccaa ttcaaacaac aataactttt 120  
 tactcggatg tctgattgag tcccgtaata tatcgagacg ctggaagttg aatgttgaag 180  
 ctttgagcaa atttaaagca caataacttt ttactcggat gtctgattga gtcccgtaat 240  
 atatcgagac gctcgaaagt gaatgttgaa gatctgagcc aattcaaacg acaataacgt 300  
 tntactcgga tgtctgattg agtcccgtaa tatatcgaga cgctcgaaat tgaatgttga 360

agctctgagc caattcaaac gacaataact ttttactcgg atgtctgact gagtcttgta 420  
 atatatcgag acgctcgaaa ttgaatgttg aagctctgag ccaatttaaa cgacaataac 480  
 ctttttactc ggatgtctga tt 502

<210> 5247  
 <211> 534  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5247

agcttcaaca ttcaacttcg agcgtctcgt tatattatac gactcaatta gacatccgag 60  
 tataaagtta ttgtcgtttg aattttctca gagcttcaac attcaatttc gagcgtctca 120  
 atatatgacg ggactcaatc agacatccga gtaaaaagat attgtcgtct taattggctc 180  
 agagcttcta cattcaattt cgagcgtttc gatatatgac gggactcaat caggcatccg 240  
 tgtaaaaagt tattgtcgtt tgaattggct cagagcttca acattcaatt tcaagcgtct 300  
 cgatatatga cgggactcaa tcaggcatcc gagtaaaaag ttattgtcgt ttgaattggc 360  
 tgagagcttc aacattcaat ttctagcgtc tcgatatatg acgggactca atcagacatc 420  
 cgagtaaaaa gatattgtcg tttgaattgg ctacagctt caacattcaa ttttgagcgt 480  
 ctcgatatat tacgggactc aatcangcat ccgagtaaaa agtattgtcg tttg 534

<210> 5248  
 <211> 487  
 <212> DNA  
 <213> Glycine max  
 <400> 5248

gagcaacatt taacgacaat tacttttttac tcggatgttt gattgagttt cgtaatatat 60  
 ggagacgctc gaaattgaat gttgaagctc tgatcaaatt caaacaacaa taactattta 120  
 ctcgatgtc tgattgagtc ctgtcatata tcgagacgct cgaaattgaa tgttgaagct 180  
 ctgagccaat ttaaacgaca gtaacttttt actcgatgt ctgaatgagt cccgtaatat 240  
 atcgagacgc tcgaaatcga atgttgaagc tctgagccaa ttcaaacgac aataactttt 300  
 tactgggatg tctgattgag tcccgttata tatcgagacg ctctaaattg gactgtgaag 360  
 ctctgggcca attaaaacga caataacttt gtactcggat gtctgattga gtcccgata 420

ttacgagacg ctcgaaattg aatgtggaag ctttttgcca atataaacga cattatcttt 480

ttactcg 487

<210> 5249

<211> 474

<212> DNA

<213> Glycine max

<400> 5249

ctcaagcttg cctaattaac ctgaaattga gagaaaatta ttattaaaga cacaaaatga 60

aaatactaag tatttattac ctatacttaa cataaaatac ttataacatt acaaaataac 120

cataaattgg gagagtttaa tacaatttat acaagtttta tacacaaaag ttagtcgttt 180

tcaccgacta acatgtaatc gattacacaa tacttgtaat cgattactag tgtttctaaa 240

tgtttttatt ttcaaattta aacatgaaga gtcacatcta ttgatgtgta atcgattaca 300

ccttgatggg aatcgattac cagtgactga tttcgaaaaa taaattacca aaagtcacaa 360

ttcttaaagt gacttgtttt tgaagagttt ttcaaaagtc acaacctttg agtgactagt 420

tctaaaagag tcacaacttt taagtgacta gttttaaaag agtcacaatt ttaa 474

<210> 5250

<211> 433

<212> DNA

<213> Glycine max

<400> 5250

agcttgtaat cgattacaca tatactgtaa tcgattacca gaggagattt tcagaaaata 60

ttctcaacag tcacatcttt tttgtgtggg tcttgaatgg ctatcaaagg cctatatata 120

tgtgacttca gacacgaatt tgacaagagt ttttcagaac aaaaaggtct tctctctta 180

aaaagcaaaa taattttatc ctcttacaaa ttccttgcc aaaactcttg tgattcaata 240

aggaattatt ttagtgctca aattgttcaa tctatctctt tatagagaga tttcttcttt 300

tcttcttctt cattctgaaa agggattaag agaccgaggg tctcttggtg tgaaaggatt 360

ctcaacacaa aggaaggatt gtccttggtg gtttagaact tgtaaaagga atttacaaga 420

tagtggaact ctc 433

<210> 5251  
 <211> 568  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5251

taatacctat taaacagttg ccatgctgat tgttgtctgt ttttatgaaa gctgtctgcc 60  
 tctcatcaat aagaccaa atcacttgtc tcaatctatt tgcttataac ttagctatca 120  
 ccttgtacat acatccaatc aaggagattg gtttgtagtc atcaaatgac tgggggtggt 180  
 tggttttggg aattagagct atgaaagaag cattactgcc tctatggaag ctgccatgca 240  
 catggaattc atctacaaat tttctgaagt cagttntcat catttcccaa aattctctaa 300  
 tgaattttga agttgaagcc atcaggtcca agacatttgt ccccatcaca actccacact 360  
 gcttctttga tctccaaatc cgaaaaagga acagcccaaa actccctctg ctcttggttt 420  
 attgaaaaga attgcactct atcaagagtg ggtctacaaa actactgctc aataatcttg 480  
 tgaggaaaaa ttcacaacct ccttcttaac atcattgggt tctgattcca tcacccttaa 540  
 tgaaaattcc ttgagaccat tttatggt 568

<210> 5252  
 <211> 511  
 <212> DNA  
 <213> Glycine max

<400> 5252

agcttaagct ttgaattgag tgccattacc attgatgatg gcataaggga gaccatatct 60  
 gtagatgagg tgtttccagg tgaacttttc tacctcccta actgagattt cttgtaatgg 120  
 ccttgccctg atccacttag tgaaatagtc gatggtgacc aataagaact tgaccactcc 180  
 tagggctttt ggcaatgggt tcaatatgtc catgccccat atggcgatag gccaagtgga 240  
 actcaagcta tgggtggttg tgggaggggt gcgtggaaca tctgtgaatt cttacctcct 300  
 tgtaaagttg aggggtgtcag ccaataatat ccgatacaca acactttggt tgctagggaa 360  
 cgacctccga tatggaggcc acatattctt tcatgtagtt atcgcatgac atagtctgct 420  
 tgttggttgt tcaagcattt gagtaagggt gttgtcaacc ttactttcaa tagttcatcg 480  
 tcaaagatga catagtaact atccttcctt t 511



<210> 5253  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<400> 5253

tattgaaaag ctagtaaata cttggaaaat atccatttgc tacatgttgg tataaaaaag 60  
 taacaacgat aataaaatta attaaggcgt acccaacaag ctttctcttg ctttgaaaag 120  
 tcattaatcg taatgaaaaa taacaattaa acaacaatta ataaaagaga agtcaagctt 180  
 attgaaaagc tagtaaatac ttggaaaata tccatttgca acatgttggg gtaaaaaagt 240  
 accaattatc tactaatga aacttatata taaaaaacat ttattaatta atcaacatgc 300  
 acctttcaat aagcgataat taatttaata aagcgatta ctagagacat ggtgaccgaa 360  
 atatttatcc tcatctatta ttgattttat ttataaaaaa cttgtatgaa aa 412

<210> 5254  
 <211> 565  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5254

agcttgcttc tcctgaatat caaatgcatt ttgggaaaaa gaaatggaca aattaggatt 60  
 ggttagaaga gactaactg aaattaaatt gaatttgaat ttaggaatgt aggcaacatt 120  
 atgcaagaat aagggtattgg ttaagcaaac cgaaccaatg gcaatgatag gtataacatc 180  
 attgttaggc agagtgcag ttttatcaga aacaagttgg taagatcaaa aatgatgaag 240  
 agaacaagaa atatgaatgt tggcaccaga atctaaaagc caacaatcat gaagaaaatt 300  
 agaagtggat atagaaagga tcataccact ggcagaagaa acaccttgag gaatgacagc 360  
 attggtagca tgactttcta aaagattcat caattggcta tattgttggg cagtaagttg 420  
 aaactgggaa cctgagtcac cagaggaaga tggtagtgta gacatatcaa cagatacttg 480  
 ttgagcaacc ttgtgtggtg gtcaaaagat gaagaatgtt tcttgacttc tgangaaaac 540  
 tagtccctag ataatttgga ggata 565

<210> 5255  
 <211> 358

<212> DNA  
<213> Glycine max

<400> 5255

tccttaatca cctcattaag gactagaaca ccatgtagga tgtgtctgtt ttttatgaaa 60  
gctgtctgcc tctcatcaat aagaccagat atcacttgtc tcaatctatt tgctaataac 120  
ttaattatca ccttgtacat acatccaatc aaggagatgg gtctgtagtc atcaaagac 180  
tggggatggt taattttggg aatgagagct atgaaggaag cattactgcc tctagggaaa 240  
ctgccatgta catggaattc atcaacaaat cttttgaagt cagctttcag catatcccaa 300  
aattctttaa tgaatttgaa gatgaaacca tcacgtccag gacatttgtc cccatcac 358

<210> 5256  
<211> 521  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5256

agcttgtgaa tgtacctatg aattgttttt ttgctatgta aataagccaa ccctgagaga 60  
atatggcgag tgaaattccg aatgacagat tctattaggg caccacaatg atcacggaca 120  
tatttattaa ttgaaccaag atgaacatat tccagataaa tataaaaacg gtcctcaacc 180  
tgcaagcaca tatgttaagg ttttaatgct gttacagaat aatgattatt aatcttgagt 240  
agctaattat gaagtaggag attgcttact atttcactgc caaaatactg tacgatgttt 300  
gaatgtttta gattgctaag aaccttaatt tcctggagaa aaagaataaa ctattaagaa 360  
ggataaagag gatatagaaa ataacatatc ttcaaaacta ttacggaacg ataaatatat 420  
atagccaagc agcccaagcc attattaagt aaaaccaacc ttataagtat tcaactacag 480  
tggaactaa aacgaaatga ggagcgtcac tgcaaaatat a 521

<210> 5257  
<211> 538  
<212> DNA  
<213> Glycine max

<400> 5257

agcttttcta aactcattca cactaaacag gccattcaac aactcattat acgttctggt 60

atcaggcaaa cacccatata tctgcatctg atcaacaaca tgcattgccc accgtactct 120  
cccaccatga cacaagccct tgataaacgt gatgaatatg acaacatttg gaggacaacc 180  
atcagccacc atattatcaa taagccgata agcctgggtca agcatagaat tcttgcaaag 240  
cacatccacc atgggctgtg aaaccacaac atgaggctga acctcacaat tcaccatcct 300  
gttccacact tcaaaagcac cctgcaaate ccagccttg gcaaaccctg gaacaagagt 360  
gctattagca gacacattca gcgggcaaaa gcaatccttc ctcatccgat cacaaactgc 420  
cacaggctca gccacattcc cactgcagca caaaccattc aagagtgtgt ggtaagcaac 480  
aacattcggg ctaacccccct ccctaaccat aaccacaaa gcagcttgca ggcagcat 538

<210> 5258  
<211> 550  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5258

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caactgcaa acattagtca aagcagcact ttccctaatac acacagcaaa caaggtttta 120  
aaaaaaaaat cactaacctt tcatttcatg actaaaacta atacagacat acttcaatca 180  
atcatcaatt cacataattg aagaaataaa gcacacaaac taatacacac atacttcaat 240  
cactcataaa aaattagtaa ctaccacacg ttgataaaaa aaacacagac acacatgtct 300  
ttgtaagtaa cataccgggtt ggggtatccaa gcgggtgggt cgggaccgta atcctttag 360  
caaccatagt acagcatctg atgaaaggag aagggaagtt canggttgag gatgctgttg 420  
ctgacgtgct gccacatggc ggggggtgcca ttgctgtgag tttcaatgat ttctgcgaga 480  
cccctgtgga gagtggcagc gtcttctctt gcaattccat gggaatcaat atccgacaca 540  
gtgatggaac 550

<210> 5259  
<211> 354  
<212> DNA  
<213> Glycine max  
<400> 5259

tgtaagttat atattcaata tattttatat gttttattta tgtagatgtt tatattttga 60

[illegible]

aacttagaga	agtgaaggca	ggctattatg	gaacttgggc	agcacatcct	ggtctaattc	60
cagtctgcat	ggagattttc	aacaacaaca	tgggcaatgc	tcccaaccaa	aataaagaca	120
atgaaacgcg	aagatggcgc	aaacataacc	gagcaagacc	tcttgcagat	accaagagga	180
gcctgcacca	tggaaggtct	cagatttatg	gttatatgct	tcttaattta	attattaaac	240
tcttaataaa	tatcttaagt	cacttgagcc	ttttttcaat	ttaattaatt	tttttttatt	300
aaaacattgg	cactagtatg	tgattaacct	atctcttttg	tattgataca	agattaagct	360
attcttatct	caagttatct	tattaactat	gctcttattg	ggacaaggaa	aaaaggaact	420
acttaaagac	acttgacaaa	gggaatataa	atactattca	aaca		464

tttgtgga	aa	ctgctctttg	gaggaatgga	aaaaggggaa	tgtgctgctt	ctgcaa	atca	60
gaattac	ctg	tggaaaaa	ga	ttcacctg	ca	cagaaatt	gt	120
taggt	aaatt	tttgt	catca	120				
ccttttt	ctg	gaatag	aggg	aagttt	ggca	ggttcat	ttg	180
cagat	gagga	aggtg	ctacc	180				
ggttga	agtc	cttgac	actg	ctttccc	gac	ctcaat	gaaa	240
tggc	acttgc	cttttt	gggg	240				
at								242

<210> 5262  
 <211> 421  
 <212> DNA  
 <213> Glycine max

<400> 5262

agcttttcgag aaattttaa at ggatcatcact ttctactcgg aagtccgatt caagcgcac 60  
 acatatagag acgctcgaaa ttgaacaacg gaagctctcg agaaattcaa atggacatat 120  
 cttgtcactc ggagggtccga ttcagggtgca taacatatcg agacgcccga tattgagcaa 180  
 cggaagctct tgagaaattc aaatgggtcat tactttttcac tcggaagtcc gattcaggca 240  
 cataacatat agagacgccc gaaattgaac aatggaagct cttgagaaat tcaaattggc 300  
 attacttttt cattcggagg tccgaatcag gcgcttcaaa tatggagacg ctcgaaattg 360  
 gaacaacgga ctctctcat atattcaa at ggtcataact ttctactcag aggtccgatt 420  
 c 421

<210> 5263  
 <211> 562  
 <212> DNA  
 <213> Glycine max

<400> 5263

agcttgtaac aaacctaatt cataatattc tcatgttaaa aataa caaaaatattc 60  
 atttaaattg tgtctaacta cattaaattg tattaaattg aatttaggtt taattactca 120  
 tttgattctt atagtttcat atttgtacct tttagttcat atagttttta aataattttt 180  
 ttagttctta taattttacat ttttaattct ttttagttct ttagttttga aattgatatt 240  
 tttagtcctt ataattttata ttttaattct ctttttagtc atataatttg aaagtgattt 300  
 tttaaatcct tatattttat attttaattc ccctttagtc tttaccatca aaatatgagt 360  
 aatattatca attacaatta actacaaaaa tattaataag taattcataa ctaatttatt 420  
 ataacataat ttgtaataaa aaattattga taatttataa ttaatttgta gctaattatt 480  
 tttatatgaa ggagtgtaaa tgatgagaac taaaaagatg acttttaaac tataggagtt 540  
 aaaatgaaat taaaatttaa tt 562

<210> 5264  
 <211> 468

<212> DNA  
<213> Glycine max

<400> 5264

agcttctaaa agagtttggg agatctctag gttcagtgga aaaccatcag cccaatggca 60  
tgtctcagag atagacccat cagatgatct gcaagaaaga gacataacaa cagttcgaaa 120  
ggtttgcatt gattcaccat tctttccaat atccatgggt ttctcaaag ctccgcggat 180  
tatgtgccgt agactctgtg cagaaggggc tgatttatct aagggaagat gaggatgcaa 240  
gaggagtcct gcttcaagaa ccttcaaatt tcttctcaac caagcttcat actcttggtg 300  
acttgaaaa tctgaactcc tgaacagttg tataagctct agtggaagaa cactgactc 360  
catgctctt tcaagctatt tcatgaacag agacctagtc agttttaata ttgtgattaa 420  
acagatgtaa gaaagaacca ttatgcagat gttcaaacat gacatttt 468

<210> 5265  
<211> 484  
<212> DNA  
<213> Glycine max

<400> 5265

ttttattttt agtagataag gatgaattcg tggccacctc atggactcct ctaagaacaa 60  
tagcgtcatt tcttgactg aattgttggg agttggaagc catcttctca attagattcc 120  
tagcctcaac aggggttata tcaccaagag ctccaccact ggcagcatca atcatactcc 180  
tattcatggt gctaagtccc tcatagaaaa attgaagaag gagttgctca gaaatctggt 240  
gggtggggaca gcttgcacac aatttcttga atctttccca gtactcatac aagctttctc 300  
cactaagttt cctgatgcct gaaatgtctt ttctgatgga agtggctcta gatgtaggga 360  
ataatttctc caagaacacc ctctaaggt cattccagct aaaaatggac ctgtgagcca 420  
ggtagtatag ccaatctttt gccactccct ccagagaatg aggaaaagtc tttagaaaaga 480  
tatg 484

<210> 5266  
<211> 553  
<212> DNA  
<213> Glycine max

<400> 5266

agcttaaacg tgttataata aattgaatga ttgaaggacg tggatgttaa atctgaacca 60  
atgaaacagg aacttgactt gtatctatgt tcaagagtgc ccgaatgcga tcccagttga 120  
cccaattatc gttagcgtac gaggcaacaa ttacactagg taagctagac aaaccaacaa 180  
tagggcaaag aggggtcaca ctcacccac taaagatgat gtggcacgta attgggcaaa 240  
gagagtgatg tagctccatg tggagcttgt aggcttgaa tcttcttcat caatggagtc 300  
ctttacttct tgaagaagaa tggcagcggg acggagaaag aagatgattg gagaccact 360  
tttaggagaa gatgcgttaa gaagaagctc accaccatag gaaaccattg ataaaagctt 420  
gaaggaagtt taacatgagt ggagggagag ggagagaatg accaccaaatt ttagtgcctc 480  
aaatgagggc tgacttttga ggataatcct caaatgatca aagttgaaat aatcacacac 540  
atgactttta ttt 553

<210> 5267  
<211> 344  
<212> DNA  
<213> Glycine max

<400> 5267

agcttgcaat cgattacatc atttgtgttaa tgcattacca ggcacaaaaa aattcaaatt 60  
tcaagtctga ggagtgcaca ctcttcacaa actaactgtg taagcgatta ctacatttat 120  
gtaatcaatt accagtaagg aattttcgaa aataactccc aagagtcaca actattcaag 180  
aagtttttga atggccatca aagccctata aataggtgtc ttattattct caaaatattc 240  
cttggccaaa acacttgcaa attcaataag gaatcttgct caatctttaa ttgtaatatc 300  
cttcttttaa agagagaaaa ttcttcttct tcttattcaa agag 344

<210> 5268  
<211> 275  
<212> DNA  
<213> Glycine max

<400> 5268

tgaccaggaa ttatttgtat tggttggatg ttgaattctg gttgttctctg gtgcggagat 60  
gatggtacag cgggtgaacc aggagcggca gtttcttttg gtgaggaagc catggaaaaa 120  
cagagcgttt ggaatgattt cggaatctc agaaaactat tgggaaatgc tggagaaaac 180

acgaatgcc a gcagatata aatttgaatg aagaatgtat aggggcgtgt gaagcaacgg 240  
 acaaattggc tttgagggga acgtgctatt aaagt 275

<210> 5269  
 <211> 507  
 <212> DNA  
 <213> Glycine max

<400> 5269

agcttggag aagaatacat ggagatttca tctgaatag gcgccactaa tggaggaaat 60  
 aaagtttaca tactaaagaa agccttatat ggtctcaagc agtctcctcg ggcttggttt 120  
 attaggttca ctcaagctat ggtatctttg ggttacaagt aaagccaagg caatgatgag 180  
 cttgaaaaat agaccctgag ggagagggtta gcagcccaat ttgagatgaa ggatcttatg 240  
 aggctaaagt actttctcgg gatagagggt gcttatactt tacgaagggt atattcattt 300  
 ctcatagaaa atatatactt gatctcctca aagaagctga caagatgggc tgtaaaacca 360  
 ctggagcacc catagagcaa aatcacaaga ttggaaatga tgaagaaagc ccaaagggtat 420  
 agaagacaca ataccaaaga ctttggggaa aacttatctt ttattcccca ccaggcttgt 480  
 atagcctatg cagatagtgt ggtagt 507

<210> 5270  
 <211> 400  
 <212> DNA  
 <213> Glycine max

<400> 5270

agcttatgag catttgaatt tctcgtgagg ttccgttgtt caatttctag cgtctcgata 60  
 tctgatgtgc ctgaatcgga gatccgagtg aaaagttatg acaattttta tatatcgaga 120  
 gcttccattg ctcaattttg agcgtcttga tatctgatgt gcctgaatcg gacatccgag 180  
 tggaaagtta tgacaatttc aatttctcaa gagctttcgg ggttcaattt tgaacgtctc 240  
 catatgtgat gcgcctgaat cggaccttcg tgtgaaaagg tatgaccatt tgaatttctc 300  
 gtcagcttgc agtggttcaat tttgagagtc tcgacatctg atgggcctga atcggaacac 360  
 tgagtggaaa ggtatgacaa ttttaatttc ttgagagctt 400



<210> 5271  
 <211> 608  
 <212> DNA  
 <213> Glycine max

<400> 5271

agcttgctct tcacggcaaa catgatagca ctggcatgtt ctgcagcatt gcctacaatt 60  
 ggaagcaaga tgacagaaat aaaagccact gacatattca atgactcaga tgctccctgc 120  
 aagagaccag aaacacaatg tcaatgaatg aacttatgat gcacaattta tggataatag 180  
 gaatattgtg aatgtatgaa tacagagttt tgatgatgtc aaagtaaaat caaacaaggt 240  
 tgtttcaaca aacattattg ctttaagatt aattcaaggt caaacaata agatcaagaa 300  
 aaagataagg tctcaaataa tctcactggg tgattgattt ttgccttaaa acaaattggt 360  
 tccaagagat caaaggctct agtattcgat tactaggcaa tgtaatcgat taccaggaga 420  
 caagtttaca aatcaacttt tataaaaaga ttgaaattg aatttttgat cttgtaatcg 480  
 attaccagat gtttgtaaaa agattaccag taaccgaact cttgaaattc aaaatgaaaa 540  
 gtcataccct ttaaaatata actgtgtaat cgattaccag tgagaatatt tcagaaaagc 600  
 tttttgaa 608

<210> 5272  
 <211> 476  
 <212> DNA  
 <213> Glycine max

<400> 5272

aactaagctt ataagtctct tggattgaaa cagcctcccg ccagtttttt taaaatttat 60  
 gagtcatttc ttcattcgct ttgaagagaa tgtcatggat cactgtatat accaaaaggt 120  
 tagtgggagt aagatttggt tccttgattt atatgtagat gatattctgc ttgcgactaa 180  
 tgataaatgt atgctatatg aggtgaaaca atttctctca aagaactttg atatgaagga 240  
 tatgggagag gcatcttatg tcataagcat aaagatccat agagaaagat ctcgaggcat 300  
 tttatgcttg tcttaagaaa cctatatata caaagttttt agagagattt aatatgaaag 360  
 attgttcacc aagtgtagct cccttgtaga ggggtgacaaa cttgctttgg tcaatgcccc 420  
 aaaaatgatt ttgagcggga acacatgaaa aatattccat atgctttagc agttgg 476

<210> 5273  
 <211> 465  
 <212> DNA  
 <213> Glycine max

<400> 5273

atactagctt cacatcagac cacttccagg gtgctggaac tacttcacat ggacttgatg 60  
 gggcctatgc aagttgaaag ccttggaga aagaggtatg cctatgttgc tgtggatgat 120  
 ttctccagat tgacctgggt caactttatc agagaaaaat cagacacctt tgaagtattc 180  
 acggagttga gtctaagact tcaaagagaa aaagactgtg tcgtgaagag aatcaggagt 240  
 gaccatggca gagagtttga aaacagcagg tttactgaat tctgcacatc tgaaggcatc 300  
 actcatgagt tctctgcagc cattacacca caacaaaatg gcatagggaa aaacaggact 360  
 atgccagaag ctgctagggt catgcttcat gccacagaac ttccctataa tctctgggca 420  
 tgagccatga acacagcatg ctacattcac aacagagtct cactt 465

<210> 5274  
 <211> 491  
 <212> DNA  
 <213> Glycine max

<400> 5274

tattgaatgt tttttatttt aagaaattat gattatataa tttgattaat ttttaattaa 60  
 attatatagc atatgatcac tttgttaata ttttctctaa tttttttagt aaatatatgg 120  
 aaaaaatgat aaaataacaa aagattatga cttccttaat tttataaaag ataaatttaa 180  
 attatatgaa tttaaatttc aaattttaca aattaaaaaa aaaacagatg ctaacttaaa 240  
 ggattctttt taaatgagta ttaaaagaaa atatttatat ttaaaataat acgtaatgta 300  
 atattggaaa attatttaat cacttatatt agaaagaaaa aaaaaagtaa tgcttaatgt 360  
 attttgtaaa cctctagtat gcttgatatt ttttaacacgt gtttgcttca tttggctttt 420  
 agtatcagac aaacatcact atattacttt ctttaatctt tactaaactt ttattttcaa 480  
 tgacattgga t 491

<210> 5275  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<400> 5275

tcttcaccag agcagcatca aggaaagtgg tttgtactat caatgggggtg gggaaactac 60  
ttttgaacaa agcgaagtcc agaatttgta gaccaggatt ggagctactg aagcttacaa 120  
ttgccagggc tgaagatttg cctgcattga tttggaaatg aagcaagcct tgagggaatg 180  
ccataacatc ccccttctta agagttttga ggtagacaat gttggcagaa gaaatgaatc 240  
cagctaggat gctcccttca attacaacaa gtaattctga agctccagga tgagtgtgaa 300  
gtggtataac ttcacctgct gctaagtcca aacgtgctgc ggaaatgcca agaccgttga 360  
gaccagcaaa ctgagcatca aatgcagggg tcaactgcagc tttgataatg t 411

<210> 5276

<211> 511

<212> DNA

<213> Glycine max

<400> 5276

agcttggagg agagcaaadc agctatatct ttcccaaacg atatgagtct ccataatct 60  
atatctttca taaacccaag attctctttg ccattttgaa atgcaccgga agaatcattg 120  
ttcttgttct tctttacact gcaggatatag gatacatcag ctgaccaatc aaggccaccc 180  
catatagtat acccaccttt gggtatcatt gacatgggtg aatcccacgt tcgggtcatc 240  
cgcattagat gctgtaaagt ttttaagacca aaaacatcct tattccaaaa acctgggtgcg 300  
aaagtcctgt atgagggtta gagattcatt agattatata aggtatcaca gctaacatga 360  
ttcattttta aacaatatca tcaatggaaa ttacataaaa attcaccctt acaaaatctg 420  
gataaaattc ttatatattg gcaaggaaac acaattttcg aagaacttat taacagaatc 480  
cacagcctta taaaaatatt ttattggagg a 511

<210> 5277

<211> 487

<212> DNA

<213> Glycine max

<400> 5277

actaagctta agaaaaatgg cctcagcaaa cttcttattt ccaaaaggaa attcaatcaa 60  
tagaccttca atctttaatg gagagggtta ccactactgg aaaacccgaa tgcaaatttt 120

tattgaggca atagacttaa atatttagga agccatagaa atagggcctt atataccac 180  
cacagtagaa agaaccacaa tagatgggag cacaacaagt gaaagcataa caatagaaaa 240  
acctagaata gatggtctga agaggataga agacgagcac aatataattt aaaagccaaa 300  
aacataatta catttgcctt gggaatggat gaatatttca gggtttcaaa ttgtaagagt 360  
gctaaagaaa tgtggaacac tctacaatta acacatgaag gtacggcaga tgttaaaaga 420  
tctaggataa acacattaac tcatgaatat gaactattta ggatgaatgc aaatgaaagc 480  
attcaag 487

<210> 5278  
<211> 383  
<212> DNA  
<213> Glycine max

<400> 5278  
ttgtccctag gctaaacccg tatcacagaa gaaaaagaag atgggagaag aaagatgcaa 60  
agctgtcaga aaaaagtaga caaactcctt aatgctaaat tcattagaga catcagatat 120  
tctacttggc tcgcatcat cgatcatggc aaaaagggtca aaggcaaagt gcgaatatgc 180  
accgactaca ctgatctaaa cagggcgtgc cctaaagatg attacctct gcacaacatc 240  
gaaaaactgt ggaaggaatg ccttccaaga ttattttgat gatgccaaag aatcaagtgt 300  
aaaacaagtt tcaagaatca agatcaagat tcaagattca agtaaagtat catgaactca 360  
gattcaagaa tcaagagaag act 383

<210> 5279  
<211> 576  
<212> DNA  
<213> Glycine max

<400> 5279  
agcttataaa gaaaaatgat ggcattgggtt taaccaatc acattatgtt gataagctat 60  
tgaagaagtt taattatttt gatgtaaac ctatttctac ttcttatgac tcatccatta 120  
agttaaagaa aaaattgaat aaaggaattt cttcacataa atatttctca attattgggtt 180  
ctttgttgca ttgacaaac ttctctaggc ctaacattgc atatgaaatt ggtagattag 240  
gaagggtatac taataatcat gatcattctc attggattgc attagaaaga gtttttagat 300

acttaaaagg aaccattaat tatgacattc attatacatg ttctcgtgca gtaattgaag 360  
 ggttttagtga tgcaaattga atttctgatt ctaatgaaac aaaattgaca agtgggttatg 420  
 tctttactgt agctgggtggg gtagtatcat ggaaatctgc taaacaaact attatttcat 480  
 gttctaccat ggaagcataa attattgctt taaatactcc tactagttag gttgagtttc 540  
 ttaaagaatt gttattgtga tttgccattg gttaat 576

<210> 5280  
 <211> 506  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5280

agctntgagc taattcaaac gacaataact ttttactcgg atgtctgatt gagtcctgtc 60  
 atatatcgac acgctcgaaa ttgaatgttg aagctctgag ccaattcaaa cgacaatatc 120  
 tttttactcg gatgtctgat tgaggcccgat aatatatcga gacgctcgaa attgaatgtt 180  
 gaacctctga gcaaattcaa acgacaataa ctttgtactc ggatgtctga tatagtcccg 240  
 taatatatcg agacgctcca aattgaatgt tgaagctctg aggaaattca aacgacaata 300  
 actttttact tggatgtctg attgaggccc gtaatatatt gagacgctct aaattgaatg 360  
 ttgaagatct gagccaattc aaaacgacaa taacttttta ctgggatgtc tgtatgagtc 420  
 ccgtaatata tcgacacgct cgaaattgaa atgttaagct ctgaccaat tcaaacgaca 480  
 attacttttt actcggatgt cagatt 506

<210> 5281  
 <211> 365  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5281

gaactcctgc ttccatcatc tcttccaaga ttatgttcca atatcttttt gtcatttata 60  
 tttatcccca cactttttctt tcattttcaaa atcgaaattc tataaatttt ttgaaatgaa 120  
 agaaagagac ccggtatact gaaatagaaa taagtgttcc aaaggaacct tctcttttac 180  
 cgaagattgg cctttgataa atgatcgggc cattttttct atttaatat taatatgatt 240

attctctnta taatctttct tttattatac aaaataaaat gaccgaagat gaatccgctc 300  
 ttaagaatca ttatttttagg aattataaat actcagatgc tgcgatgtat cgcataaatt 360  
 ctttg 365

<210> 5282  
 <211> 480  
 <212> DNA  
 <213> Glycine max

<400> 5282

agcttcttac aaagcatacg gctttctgga tgtatatgat gatatctata cagatggatc 60  
 ttatatatct atatatctat agatagatat atagatgtag atatatagat atagatcata 120  
 caatgaagta ccgcacgagt ggggtatatag gaatccaaat ctgccgaatc actcatgtta 180  
 tgatcttcta catcctaggt cttcccgttc cttcatctgg cttatgttct tcatgttagca 240  
 ttcagactga atgactctat gaaattacgt cgctacttcc acatggtagc ggtaacgtag 300  
 gagacatctc tatttttccc ggggggaatc cttagaatta ccacagctta gcttttaatt 360  
 cgctctgac catcaaatga aatgtgaata acgccgtctc cccttttttg agactttgaa 420  
 acaaagggtg cttccggttc tgtcgggtgg tgaacaatt ttgtcttctc catattacta 480

<210> 5283  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<400> 5283

tttaaatttc ttttaagatc tccatgctga attaatTTTT gttttgaatt cttaatacat 60  
 ccttttggtg cattggatctt cttatatatt aaatgtgatt ttgagttttt attgtataac 120  
 gtgttacatc tcaatggtag atatatagta ggaattgact gttgagatga tatcatatta 180  
 tcaactcactt actcaaaata aaagttttga catattaggg atattatatt ataaaaaaat 240  
 tatttgagac ccaagtaaaa attgatcatc tatttattat gatatcaaag atgtttaaac 300  
 atttttttgg catttttagag tgaattgaga tgtaaagaaa gagggatatt tgtgaattgc 360  
 tagaatcat 369

<210> 5284  
 <211> 331  
 <212> DNA  
 <213> Glycine max

<400> 5284

agcttgtagg gttaaagtct catgattgtc ttgtcctcat gcaacaattt tcaaccgtgg 60  
 ctatacgaga tatcttgcca aacaaagtcc ggttatcgat aactcgactg tgctttttct 120  
 tccatgctat ggttagcaaa gtcattgatc cattcaagtt tgatgagttg gaaaatgagg 180  
 cccaattat attgtgccag ttggagatgt atcttcccc tactttcttt gacatcatga 240  
 ttcacttgat tgtgcatctg gacagagaaa tcaaatgttg tggcctgtt tatctactgt 300  
 gaatgtaccc cgttgagcga tacataaaga t 331

<210> 5285  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5285

tgtaggcctt ggatcttctt catcaatgga gtcctttgct tcttgaattt taatggcagc 60  
 aaaatggaga agaagaagag ttgagcggag acgccacttc aagaagaaga tgagtctaga 120  
 agaagctcac caccatagga agccacggat aagagcttga aggtaggaga agatgaatgg 180  
 agggagaggg agagaaggag caagaaattt tgtgcctcaa aagaggtgtg aactttgaag 240  
 ttttaattctc aaatgataaa agttgaaaaa atgcacacac atggccttta tttatagcct 300  
 aagtgtcaca caaaattgga gggaaatttg aatttctatt caaattttac ttgaatttga 360  
 aattgaattt gtggagcaaa aatttcacta attatgatta gtgaatntta gctatggttt 420  
 agccccctaa tcgaagatca 440

<210> 5286  
 <211> 240  
 <212> DNA  
 <213> Glycine max

<400> 5286

aactccccct ttgagaaaat tcaaacgaca ataacttttt actcggatgt ctgattgagt 60

cccggaatat atctagaggg tcgaaattgg ataccgaagc tctgagcaca ttcaaacgac 120  
 aaaaactttt tactcggatg tctgattgaa ttccgtaata tatcgtaaag ctcgaaattg 180  
 aatgccgaag ctctgagcta attctaacga caaaaacttt ttactcggat gtctgattga 240

<210> 5287  
 <211> 488  
 <212> DNA  
 <213> Glycine max

<400> 5287

agcttatgct aatctacctt gcaccccaag ttcaacacgg tcccaaataa atcaaacact 60  
 atcatatata ggcataggca catccatcat tctctcatca attcatccat tattagcttt 120  
 tttgtttctt caattttttc ccattttctt agcccacaat tccaaggaac aaaaatgatg 180  
 agagaggggtc aacaacatgg tatggtgaga tcttattgga tcctactaaa tccacttaat 240  
 cctagaccta ataccagaat cattaatcgg tctaattccc cttacaccac tagaaatatt 300  
 tggtaggggtt tcttctaagc caactaatca ctcaaagta acaggaaagt gtggcaaacc 360  
 acgttgccct gggtgccacc tctactcagc ttggaagtcc aaggggccaaa cccaaggtac 420  
 caaaaagcac aaacacttag taacacacta ctataaaaaa taagctttaa ccgatgtgga 480  
 ttcaatga 488

<210> 5288  
 <211> 460  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5288

tgtaaacttg tccaaaatcg cgaagtgaac ctcggatccc tgtcagatac aatactagaa 60  
 ggaattccat gcaaccttac tactttcttg atgtacaact ccactagctt ctccattcta 120  
 tacttcatat tcaccggaat aaaatgagca gatttggtga gtcgatctac tatgaccac 180  
 acagcatcat gtccacgact agtettangt aaactagata caaaatccat agatatgctc 240  
 tcccatttcc attccgggat ttccaatggc ttcaattctc ccgatggctg ctggtgctca 300  
 acctagcct ttgacatgt caaacatctt gctacatatt cagctacatc tttcttcatg 360  
 ccatgccacc aaaaacttct cttcaaactt tggtagatct tagtcattcc tggatggaaa 420



ctaagacgac ctttatgcg c ttcttccaag atcttaactc

460

<210> 5289  
<211> 633  
<212> DNA  
<213> Glycine max

<400> 5289

agcttctata gaaggttcgt tcctaatttc tctacaattg catcacctct caatgagctg 60  
gcgaagaaga atgtggcatt tacctggggg gaaaaacaag agcaagcctt tgctttgctc 120  
aaagaaaaac ttactaaggc atctgttcta gctcttcctg acatttctaa aacttttgag 180  
ctagaatgtg atgcctctgg agtgggagtt ggagctgtat tgttacaagg tgggcaccct 240  
attgcttatt ttagtgaaaa acttcatagt gccaccctca actacccac ctatgataaa 300  
gagctttatg ccttaataag agccctccaa acttggaac attaccttgt ttccaaggaa 360  
gttgctcatt atagtatca tcaatcactt aagtacatta gaaggcaaag caagttaaac 420  
aagaggcatg caaaatgggt agagtaccta tagcaatttc catatgttat caaatacaaa 480  
aagggaaata caaatgtggt agctgatgcc ctctcttcga gacacacatt gttttgctcc 540  
ctaagagctc aaatttacga tttgataata tagggacttg tatgctttag atgaacattt 600  
ctcttccatt tatgatagtt ggggaaaaaa ggc 633

<210> 5290  
<211> 378  
<212> DNA  
<213> Glycine max

<400> 5290

gacactatga aactaagctt gagcaacttc aaacgacaat aaacttttac ttcggatgtc 60  
tgtatggagt gcccgaata tatcgggacg ccccgaaatg gaatacggaa gcttttagaa 120  
aattcaaacg acaaataact ttttattcgg atgtctgatt gagtcccgta atatatcgaa 180  
acgctcgaaa ttgaatgttg aagctctgag caaattcaaa cgacaataac gtcttactcg 240  
gatgtctgat tgagtctcgt aatatatcga gacgctcgaa atggaatacc gaagctctga 300  
gcaaattcaa acgacaataa ctttttactc cgatgtctga ttgagtcccg taatatatcg 360  
agacgctcga aattgaat 378

<210> 5291  
 <211> 183  
 <212> DNA  
 <213> Glycine max

<400> 5291

gatcaaaaga tttgggatgg atagtgc aaa acacatgtct acaccgatga gcactaattg 60  
 ttacttagat aaagatgaat ctggtcagtc tatagacata aaacaatata gaggtgtgat 120  
 cggatctctt ctttatttat ctgctagtag acctgatatt atgttttagtg tatgcatgtg 180  
 tgc 183

<210> 5292  
 <211> 486  
 <212> DNA  
 <213> Glycine max

<400> 5292

ccggatcatgg aaagacttgg caactgcctt cattatgtag taccaatata acatgggtat 60  
 ggctcctgat cggaaccaac ttcagagcat gaccaagcgg gaacatgagt ccattaaaga 120  
 atatgctcaa aggtggagag acctagcagc ccaagtcgtc ccacctatga ctgagaggga 180  
 aatgatcacg ataatggtag atacgttgcc tacgttctac tacgagaagc tgataggata 240  
 tatgacgact aactttgcag acctcgtctt caccggagaa agaatacaagt ctggactgag 300  
 gaaaggcaag tttgaatatg cctccaacac tgtccccaac aacaatagaa gagccccagt 360  
 ggtgggcaca ctgaaaaagg aaggagatac ccacgcagtc accaccgccc caacatggat 420  
 gaaaacgccc cagaacggcc aaaactcata ccagcacaac cacgcgaatc ttttttatcc 480  
 gagccg 486

<210> 5293  
 <211> 471  
 <212> DNA  
 <213> Glycine max

<400> 5293

agcttgggaag cattttgata gaatgcattc tatgtttact ctccataggaa tgtcaaatta 60  
 gaaaacctta ctcttggttg ctagttatct taactccata tcccccccc cccccccct 120

gatttttgca ggaagagggga aattatgggtt ttgaaattct taattccatg tccatcaaatt 180  
 ccaaagcaca aaattgatgt gactttgcaa ttgctaataa atgagttatg taccttatgg 240  
 aatgatggcg tactaaatca ccatgtggct ttgaggctaa ttcttgagat aaggctgttt 300  
 tgatgtggac tttaaatgac ttctcaactt atgggattgt gtcattgttg atgacgacag 360  
 ggacacttgg attgtctatt tgaatggaaa catacaaagg cattcacaaa tataaacttt 420  
 gtcaaagctt tggatttttg attgtcatca ccaattcctt gcccttgatc a 471

<210> 5294  
 <211> 401  
 <212> DNA  
 <213> Glycine max

<400> 5294

tgctctaagc tgtcaattcc cttagaaaaa ttttgatttt tatagcttca tcaaaacccat 60  
 gagtgggagt ttgcctaagc aaatatctaa atctttccca agcttctcta aggaactcat 120  
 catatgtttg ttggaaaata tatagcagcc tttcccttgt tgatctttga ccttgggaaa 180  
 tacttgtacg gaaacttggc cattacgtca tcccaccta acaagttatt cggaggaaaag 240  
 gatcttaacc atgagatgac atctctagct agagaaaaaa ggaaacaagc acaaacttca 300  
 ttccgccacat gatttatctt cacgggtgtg catatgtcaa tgaagggtga ttgatgtgtt 360  
 tatggattct catgattatg ctcatggaat tgattatttt g 401

<210> 5295  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<400> 5295

tattcaaata tgacttaaaa caaaaaagaa tttcatattt ttcagggatc aagaatacat 60  
 tttagtcagc aattgaagat aacacgtttt ttaaaatttg gacattgctg ttcctcaatg 120  
 gttatttttg tttgtgttgt agggagtctc tgctgttagg gccttttatg agctacttag 180  
 ccagtccagc ttaaatgtcc taaatcctga agagaacaag catgtagccc cagtggagct 240  
 ctgtcccatc ttgaagatgt tatacagaat attgataata aggtaacaca tttagctacc 300  
 tcctttttta cctttgaatg atcaaaacag agaactgaat tctaattgtg aaactacat 360

tttcaatggg ttttgctgat ctt

383

<210> 5296  
<211> 509  
<212> DNA  
<213> Glycine max

<400> 5296

agcttgacca ggaattactt gtatggggtg gatggtgaat tctggttgtt cctgggtgcgg 60  
agatgatggg acagcgggtg aaccacaagc ggaagtttct tttggtgagg tagccatgga 120  
aaaacagagc gtttggaatg atttcgaaaa tctcacaaaa ctattgggaa atgctggtaa 180  
aaacacgaat gccaaagcaga tataaatttg aatgaagaat gtagaggggc gtgtgaggca 240  
acgggtcgaat ttgctttgtg gtgaacgtgc tattaatgtt aagtgattcg tttgggcacg 300  
ttcagattgc agtagctgct ataattcctc tagcagacaa atgccagct tgcccctcag 360  
ttattcaaac tgatttgcac ccaaagcctt tgagaaaata tctgctattt gttcctcagt 420  
gtcaacatgc ttcagtgtga tcactttatt atcaacaaga tctctgatat agtgatgcct 480  
aatgccaatg ggcttggttt tgctgtgtt 509

<210> 5297  
<211> 544  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5297

agctttctcaa ccaaatacaa aaccctcact tgcttcgtga attgccagca gtaacctctc 60  
ttctaaatgg tgtttagatg gatactccgg cgagctaata gaataatctg cttgaagaaa 120  
attccgtttt gattatttca aatcacacga ctataatgat ccatcaaaat ataaatatag 180  
cctatagctt acagataatc aactgaatg gtaataggta tataggccta tagggaattt 240  
tgaaaagggg gaaaagacat accaagtatg agcagaaggc aagtgatcag gacttccata 300  
tgcttttgtt atctgaaact tctgggagcc tgaaattcct tgaagagcgc taaagccttc 360  
caaaggcacc tgaaacatta gtgaaaaaaa tgttttaacg gcttcaagtt tgcaaaaata 420  
atatgccaac atcattaata tatcataaca aatcccagga caaagagaaa gctctgatcc 480

aaggtgggca aaattgagat cttatgggga gaagaatgan agaactcgtg aacatgaatc 540  
ataa 544

<210> 5298  
<211> 346  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5298

tgctaatagc ctcatttggga gattatgaga taaaggagac acaataagag ttgattctaa 60  
naatattatg tcctgngcta tatggaatac acttcaactt cttgaagaac ctttgggaga 120  
ttatgaacga ggatatggtg aggttcattt tcgaattcca tgctcatgga antctaccta 180  
gaggtactaa tgcttctttc ataactcttg tgcccaaagt agaagaccca tataactgag 240  
tgcgttatac ccataccttg gtgggatgta tgcacaaagt tctaacanaa ctcttataga 300  
atagaatgac aaacgtgatg aatgggggtga atgatcatag acaaag 346

<210> 5299  
<211> 451  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5299

ctacaagggt atgataaatn tgctggaaga atcaatgaaa cattggacta tcgctccgcg 60  
agagatgcgc aaggacatgg aacacacaca gcctcaactg cagctggtaa catggtgagc 120  
aatgccagcc ctttcggctt ggcacgcggt tctgccagtg gaatgaggta cacctcaaga 180  
atagctgctt ataaagtatg ctggcgnta ggctgtgcta actctgacat attggcagct 240  
attgatcaag ctggtgctga tgggtggtgat gtgtagtcac tctctntaggt tgggatgcta 300  
aaccttacta caatgacagc agtgccatag cctcatttgg agcaacacac aaaggagttg 360  
ttgtttcttg gtcagcacgg caatctggtc cctctagatc aactgctgga tatgttgccc 420  
atggatcatg actggtgctg ctagctacac t 451

<210> 5300  
<211> 281  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5300

gctatgctgc anaaattaca atagacctcc tcaaccctag cagcaaaatc aaccacagca 60  
gaacaattat gacctctcta gtaacagata caatcccgga tggaggaatc accctaattct 120  
cagatggtct agccctcaac aacaacaaca acaacaacct gctccttctt tccaaaatgc 180  
tgctggtcca aacagggtcat acgttctctc tccaatgcaa caacatcaac aacaatagca 240  
acaatagcca cagagacaac aatcaactga ggccccttct c 281

<210> 5301

<211> 241

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5301

agtcccgctc aggtagtccc ganatagact agcctcacag tgatcagana tgagaacgat 60  
gagctgattc ctactcgggt gcagaacagt tggagagtct gcattgacta taggaggctg 120  
aaccagggtta ccaaaaagga ccatnttccc ctgccattca ttgaccagat gctagaacgc 180  
ctggcaggta aatcccacta ctgtttcctt gatgggtttt ctgggtatat gcaaattact 240  
a 281

<210> 5302

<211> 357

<212> DNA

<213> Glycine max

<400> 5302

gctatgaaat agtttattat gactccttcg ataagcttat gagacaataa gaagttcgcg 60  
acattaagct ctctaagagc ttatggaata tgggtggtgt tggataaata acttaattaa 120  
ttacttattg aataagtgat tatcatggaa aagttgttta tagaaccaa gaggaataa 180  
tgtaagggtg aagggtgtct cataagctat cgtagagagc ttattgaagt aaagctgaaa 240  
agagcttata tgcatattgt aaccgatttt ttataagctt ttccaccagt tacataaatg 300  
tttatgtcat aagataagtc aaataagctg tgtaaataag ctcttaaact caaactt 357

<210> 5303  
 <211> 376  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5303

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 atgggttgcaa atgtgtgtac aagatcaagc atcatgctga tggatccatt gaacgataca 120  
 aggccccgttt ggtggcagag ggatacactc aactagaggg tgtggattat nttgacactn 180  
 tntcaccagt tgctaagctt accacaattc gcacccttct atctgtggct gctattaagg 240  
 actggcactt agaacaactt gacgtcaaca atgctnttct tcatgggtgat ctgcatgagg 300  
 aagtatatat ggatctgcct cctgagtcct actgcctggt cttctttaat aagtctgaaa 360  
 tacataagtc ttatat 376

<210> 5304  
 <211> 366  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5304

gcgtctcgat ataatacggg actcaatcag acatccgagt aanaagttat ggtcgttgga 60  
 atagcctctg aggttcaaca ttcaatttcg agcgtctcaa tatatttcgg gactcaatca 120  
 gacatccgag taaaaagtta ttgtcgtttc aattggctca gaggttcaac attncaattt 180  
 gagcgtcccg atatattacg tcaactgaatc ggacatccga gtaaaaagtt attgtcgttt 240  
 ggaattgctc aaatcttaaa catttcaatt cgagtgtctc gacatattac gggactcaat 300  
 caaacatacg agaaaaaagt tatggtcgtn tgaatttgct ctcagcttca acattcaatt 360  
 tcgagt 366

<210> 5305  
 <211> 359  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5305





<210> 5308  
 <211> 447  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5308

agcttagtaa agctaagcac taacaatact cctctttggc gaattatgtc tagaacatac 60  
 ttagacactt nctgagcagg tacgagcaga tatgcaagtg ggatcagcaa ctntcattat 120  
 cagagtaatc aagcacagcg gtatctgtag tggcgacagc aaaattctgc aggttgcaag 180  
 tcgttgtcag gatgtcaaga catctcatgt gacatcagct ntctgctccc cctgtctcca 240  
 tgctgctact gctgtgaagc agttcactgc agcatcttct atcagctact atgcttctcc 300  
 aggatgcaag acatctcacg tgacatcagc tnttngctac cnetggctcc atgctcgtac 360  
 tgcattcttct atcagctact aagttcagta gcgtacatca gtcattcatca gcagcagtct 420  
 cccctcaca atcatataca tacaact 447

<210> 5309  
 <211> 281  
 <212> DNA  
 <213> Glycine max

<400> 5309

actcggatga ctggatgagt cccgtcatat atcgagacgc tcgaaattga atgttgatgc 60  
 tctgagcaaa ttcagacgac aataactttc tactcggatg tctgattgag tcccgtcaca 120  
 tatcgagatg ctcgaaactg aatgttgaag ctctcggcca attcaaacga caacaacatt 180  
 ttactcggat gtctgcttga gtcccagaac atatcgagac gctcgaaaat gaatgtggaa 240  
 gctctgagcc cattcaggcg acaataactt ttactcggga t 281

<210> 5310  
 <211> 465  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5310

ctgcagctaa gctgttacat ttctaaaagt ccctgaattt anaattataa tggcccccttc 60  
 ataatnntca aaactttttc aataggatca ctgaatccaa tctgctggta ggtccctaca 120

nagatccaat tgaaagaata aacaatatgg ggaccaatt atagtntta aactatagga 180  
acctatntaa gaatacccta cacataaagg gggctggcag anntaattaa ctactaatat 240  
attcttcagc tcccgcctat tatgtgaaca ccttgnncaa cagaatattt ttgttcagtt 300  
tatattanaa tcacatatac gtagaagtag aatcaactac taaantattt acctcaacac 360  
tattcttgcc aatccatggt cctataagac aatcttcttt atcctctcca ggatatgtat 420  
actgaaagat gaagcaatct ncactattaa aatttgactg atcag 465

<210> 5311  
<211> 256  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5311

tcgctggggc agcatctaga gtcctagaag catattatat caccctgtgc aatntatcaa 60  
ttntctgagc aaggacagcg cccaatgcat aatttgatgc atcacacata agctcaaaag 120  
gggctgttca atcggctgcc tggatgatgg aggtggtagt cagcgctctc ataatgcaat 180  
caaaagcctc ttgcatctg tcattaaagt caaactccac ctccttngc aacatgttgg 240  
acagtggaat ggctac 256

<210> 5312  
<211> 385  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5312

gctacatcac tggggaagat aacaatatcg attcatccgg agacctcaaa natgaagttg 60  
tanatntaag tctcatggcc aacaactatg aaagcgaaga agagaggatg ctctanacac 120  
atgatgggag atgcatcaaa gtttactcat atttctccca agaatagtgg acatgtgact 180  
tatggtgaca acaacaaagg taaaattctt ggagtcggaa aaataggatg gaatccatct 240  
acctccattg aaaatgggtt acttgggtgat gatcttaagc atagtctgct aagtgttagt 300  
caattatgtg ataaaggtn ttagtggtca ttggactctc ataatgtgat attaaaaata 360  
aacatgatna aaaatataaa catta 385

<210> 5313  
 <211> 419  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5313

ttaaattgttt aaatatatttc atatatttat atattaagta gttaagaatt attaataatc 60  
 agttnttttca gggagactta ttaattgata tgtgatcatc gattgagaaa attatatatg 120  
 tgatgggttga tgtagatga attatgggtac tttatcagat tatagcaacg gtctttatga 180  
 ttttaataaaa gagcttgtat gcaaataatat ntagtaacat cctctgtgat ttcctataat 240  
 aatgctgtgt aaattaaaag catacactaa cattgctttg aagcataccc tacactcttc 300  
 actntcttca atcttatcta cacttctaga taagagaatt atattaaaac agagatcttg 360  
 ataataaca aattagaaat atatataatg gtctcattta aatcttagat gtaaaaaat 419

<210> 5314  
 <211> 462  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5314

tcacctgcgg catgcaagct tggatcatctt gagctagtag gtcacatcc ttatttgaag 60  
 ttgggtgngc aacatatatttc tttggcctaa taggaactcc aatatttttg cagcttctga 120  
 tgttatgatt gggttgcca caccttccac atgtaaagtc aggcaatttc ctctttagcc 180  
 tatgtcctat gacattgtct tcactacag atctcattct atttttctta ggccttcctc 240  
 tttggacctt tttatgtggt ggaacagggt gtgcatgttg tgtctgggcc caatattgtg 300  
 gtccttgac tgggtcaata aaatgggtgt atgtcttgtt ataagcctct attgacagcc 360  
 actcatgaca catgtcctca ggcttgctc ctttgtgact tattgntgca atggcatgtc 420  
 gcatggcatc cctacatcaa agttgtcaaa tcagcacaca tg 462

<210> 5315  
 <211> 449  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5315

agcttaacaa aagggcatgtg aagnggggtgg aattcctata tcaattccct tatgttatca 60  
aacataaaaa gggaaaaggt aatattgtag ccgatgctct ttctcggcgt catgcattac 120  
tttctatgct tgaacaaaaa ttgattggtc ttgaatgttt gaaaagcatg tatgaaaatg 180  
atgaaacttt tggagaaatt tttaaaaatt gtgaaaaatt ttcagaaaat ggtttcttta 240  
gacatgaagg ctttcttttc aaagaaaaca aattgtgtgt gcctaaatgt tctactaaaa 300  
atttgcttgt ttgtgaagca catgaaggag gtttaatggg gcattttggg gtccaaaaga 360  
ctctagaaac attacaagaa cttttttatt ggcctcatat gaaaaaggat gtgcagaaat 420  
attgtgaaca ttgcattgta tgtaaaaag 449

<210> 5316  
<211> 446  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5316

agcttatatg cccaacaatt aaatcagcgt gcttatgctt tatagtgtgg gggaaggaat 60  
taccaggatc cttgcacaag atgaaaataa ttttctctct ttgaccgttt aaaatgataa 120  
ttgctcaaat aatcggttta atcagctctc aaaccgatca attagagaat tgaattgata 180  
aagaacataa taaaataaaa ccaaattaat ggcaaaaacg gatttgaact ggagtatttc 240  
ttatgctttt tattcataaa cctttgttaa ataacactcg tacaagaaat gtatctgtaa 300  
aacggaattt taaataaaat actaaagata aaagtatgaa gaaaaaaact tatangttnt 360  
caaagttaat tcaagtacct tcttctaaaa aataaattat taaaataagt ttactttata 420  
aacanatagc ttataaacta gtcaaaa 446

<210> 5317  
<211> 277  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5317

cttaactcgg aggtccgata caagcgcata atatatcgag acgctcgaaa ttaaccaacg 60  
gaagctctcg agaaattcaa atggtcataa cttttaactc ggatgtccga ttcaggcgca 120  
taatatatcg agacgctcga aatntaacia cggaagctct cgagaaattc aaatgggtcat 180  
aactttttac tcggacgtcc gattcaagcg cataatatat cgagacgctc aaaaattaac 240  
aacggaagct ctcgagaaat tccaatggtc ataactt 277

<210> 5318  
<211> 344  
<212> DNA  
<213> Glycine max

<400> 5318

agcttctaca ttcaatttcg agcttttcga tatattactt gtactcaatc ggacatccga 60  
gtaaaaagtt attgtagttc gaatttgctc agggcttctg tattccattt cgagcgtctc 120  
gatataattac gggactcaat cggacatcag agtataaagc tattgatggg tgaattttct 180  
cagagctatc gctttccatt tcgagcatct cgatatatta cgggtactcat tcagacgtcc 240  
cagtgacaag ttatgtgagt ttaaattgcc cagggcttcg gtattccatt gcgagcggtt 300  
cgacgtatta cgggactcaa tctgacatcc gagtaaaaag atat 344

<210> 5319  
<211> 409  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5319

tctgttagtg ttatgcctct gtctatttnt aattctctat cttaggtccc ttgcagtcaa 60  
ctgatgtggg aattcattta gctaataga gtgttgctta cctgttggt ttcatagaag 120  
atgtcttagt tagagttggg gaactgattt tccctgttga tttttatatt ttgaatatgg 180  
aggatggatt ttctcaagga tcagttccca tcattctagg cagacccttt atgaaaactg 240  
ctagaactaa gatagatggt tatgcaggca cactatccat ggagtttggt gatataattg 300  
ttcattttaa tattctggat gctatgaaat acccatatga agatccttct gtatttcgtg 360  
ctgaaataat tgaccatgtc gttgatgaat acatgactga tctttactc 409

<210> 5320  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<400> 5320

ctcagcttgt gaagcaaagg ccagctatgg tcttcaaggt ggattttgaa aattctctat 60  
 gactcagtct catgggcttt tctggattat atgctgcaaa gaatgagctt ttgccccaaa 120  
 tggagacaat ggattttctgc ctgtctcaat tcagcaacca tttcaattct tgtgaatggc 180  
 agtcctacaa aggagattgc tctactata ggcttgatgc aaggggaccc tttagctccc 240  
 ttactcttca atatagttgg agaaggcatc acaggattga tgagggaagc agttcagaag 300  
 aatgtatata gaagttacat ggttggaaag aaaaaggaac ccactaatat tttgcagtat 360  
 gcagatgaca cagtatttgt gggaggctgc ttgggaga 398

<210> 5321  
 <211> 306  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5321

agctntgagc aaattcaaac gacaataact tttgactctg atgtccgatt gtgtcccgtg 60  
 gtatatcgag atgctcgtaa ttgaaaacag aagctctaag caaattcaaa cgacaataac 120  
 ttttgactcg ggtgtccgat tgtgtccggc gtatatcgag atgctcgaaa ttgaaaactg 180  
 aagctctgaa aaaaatcaaa tgacgataac tttttactcg gatgtccgat tgaatcccgt 240  
 aatatatcga gacactcgta attgaaaata gaagctttga gcaaattcaa acgaccataa 300  
 cttttg 306

<210> 5322  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5322

ctcaagctta tgctgcatan attacaatag acctcctcaa ccttagcttc taaatcaacc 60  
 acttcagaac aattatgacc tctctagtaa cagatacaat cccggatgga ggaatcacc 120

taatctcaga tgggtctaacc ctcaacaaca acaacaacaa caacctgctc cttccttcca 180  
 aaatgctgct ggtccaaaca gggtacacgt tctcctcca atgcaacaac atcaacaaca 240  
 atagcaacaa tagccacaga gacaacaatc aactgaggcc ccttctcaac cttccttaga 300  
 gcagttagtg aggcaaattg caatacaaaa tatgcagttt caacaagaga caagagcctt 360  
 cattcagagt ttgacaaatc agatggggca gatgaccact cagttgaacc atgctcaatc 420  
 ccaaaaactct aacaagct 438

<210> 5323  
 <211> 456  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5323

cagcttgagc cnaaacccaa ctgcgcgtaa atcttgatct gttttagaat ctccatcctc 60  
 gccctcagaa gaaaacaaaa ggaaaaaaga atgttcccgga ccaaagatcg gaagagaact 120  
 aatagaaaat atacagaaag gtcttctgac caggcaacat ctgaacagaa cataactgtc 180  
 accagcaaac aagaaaagaa aggaaaccac aatttgaagt ggtcctcttc ctttgattac 240  
 caacccaaat ctcatgcact ggcaactttc tcgttccgca ctaaacaaaa acagagaggg 300  
 aaaggccaaa aactcagag ccaaattttc caccaaaaac actattcacc aaaagtccta 360  
 ttgatccgtg atcacatgtg taatctttga ttgatagga aatggcttgc aattcaagtc 420  
 atgacatatc tatggtttgg aattaagatg aaacac 456

<210> 5324  
 <211> 326  
 <212> DNA  
 <213> Glycine max

<400> 5324

tatcacggac ctatgaaact aagcttaaca ttcaatttcg agcgtctcga tatattacga 60  
 gtcttatatc aaacatccga gaaaaaagtt attgtcgttt gaatttgctc agagggtcaa 120  
 cattcaattt cgagcgtctc gatatattac aggactcaat cagacatccg agtaaaaagg 180  
 tattgtcgtt tgaattggct cagagcttca acattcaact tcgagcgtct cgatatatta 240

cgagactcaa tcagacatcc gagtaaaaag atattgtcgc ttgaattggc tcagagcttc 300  
aacattcaat ttagagcgtc ttgata 326

<210> 5325  
<211> 386  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5325

agcttagagc caattcaaac gacaataact tcttactcgg atgtctgatt gagtcccgtc 60  
atatatcgag acgctcgaaa tttaatgctg aagctcttag ccaattcaaa cgacaataac 120  
tttttactcg aatgtctgat tgagtcctgt aatataacga gttgctcgaa attgaatggt 180  
gaagctctga gccaatcaaa acgacaataa ctttttactc ggatgtctga ttgagtcccg 240  
tcatatattg agacgctcga aattgaaagt tgaatctctg agccaattca aacgacaata 300  
actttttact cagatgtctg actgagtcgc gtnatataac gagacgctcg aaattgaatg 360  
ttgaagctct gagctcattc aaacga 386

<210> 5326  
<211> 401  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5326

taatacccaa aatcacatct acacgaccaa ggtctttcat atcaaatttt ctagacaaga 60  
aagacttcac atcatttaca tattactacc aaatatcaat atgtcatcca gatacaaaca 120  
taaaatgaca catccactat catcaaattg tttcatatac acacattatc actatcatta 180  
atttgaaaac catacgaaag aataactnga tcaaactttt gtgtcattgc tttggagctt 240  
gtttcaaacc atatagagat ttaacaattt atttttcaag gaaaaacatt ttcaaagaaa 300  
gtgacatctc tagattccat aatagtacca ttagaaattt ttgacacttc tgaattaaca 360  
actaagaatc tataagaagt atcatgttaa gaatatccaa c 401

<210> 5327  
<211> 395  
<212> DNA



<213> Glycine max

<223> unsure at all n locations

<400> 5327

cggatggaga agaagagagt gcgaggaaaa tagggcttgc tttctaatat ttntaaatgt 60  
agcttcaaca tcagttttca atacaaaact gatgttaact atgtgatgta aacgttaaca 120  
tcggctttat gaaaaaaatc aatgttaatg aagtcattgt aacatcggtt tttgaaaaac 180  
cgatgttaat gtaagtctgt taacatcggt tttctgcaaa atcgatgtca actaatgcac 240  
attatttaca attatgccac cgcatttatg ttaacatcgg ttttaccaaa aaccgatgtt 300  
aacctgatga tgttaaactct atagtctcta gtagtcctt tgaagcagat gtaaaagaac 360  
gtcaacgaaa gattacgatt tgcccttcat tgatt 395

<210> 5328

<211> 441

<212> DNA

<213> Glycine max

<400> 5328

cgcttgatgt ttgtgttgaa tgcattaaag gtaaataac caatagaaag aaattgggtg 60  
catatagagc tacaacgctc ttggaattga tacatacgga catttgtggg ccatttcata 120  
caccttcatg gaatgggtcaa caatatttta catcactcat agacgattac tccagatatg 180  
catatatgct tcttatacat gaaaagtcac aatctctaga tgtgttcaaa acatttaaag 240  
ttgaagttga aaatcaactc aataaaagaa tcatgagtgt cagatctgac catagtgatg 300  
aattatatgg cagatatgac agttcaggtg aacatcgccc gaggccgttt gccagctact 360  
tagaggaata tggaatcgtc ccacaataca ccatgtcggg gtcacttgca tgaacagtgt 420  
gactgaaaga cgaaacataa c 441

<210> 5329

<211> 308

<212> DNA

<213> Glycine max

<400> 5329

tagcatcact ctttaattgta tcattgtgag ctttatgtgc ttagggagga aaaacagaag 60  
caaccaaata attcacaata ttggaaaact agggagtggg gaaggaatca gaaatactat 120

acagaatgta caaatggtca tccagaaaat catcccgat aggtgagtc ttagacacac 180  
 gctcaatcct actcaagtgg tcaaccacaa ggttctgtgc accgctccga tcacggatct 240  
 ccaaatcaaa ctcttgagc caaagcatcc acctaataa tctaggcttt gattcagcct 300  
 tcttcaac 308

<210> 5330  
 <211> 413  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5330

agctntnnta ttttagcaga tgaagatgaa tctgtggcca cctcatggac tcctctaagg 60  
 acaatagcat aatttcttgc actgaattgt tgggagttgg aagccatctt ctcaatcaaa 120  
 ttcctagcct caacaggagt catatcacca agggctccac cactggcagc atcaatcata 180  
 ctctctcca tgttgctaag tccttcatag aaatactata gaaggagttg ctgagaaatc 240  
 tgggtggtgag gatagcttgc acacaatttc ttgaaacttt cctagtactc atacaagctc 300  
 tctccactaa gttacctgat gcctgaaatg tcttttctga tggcagtggt cctagatgca 360  
 gggaagaatt tctccaagaa cactctctta aggtcatnct agctggagat gga 413

<210> 5331  
 <211> 366  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5331

tccattggtg tctngaagtc taaagccgat gaaggacatc tgtaatcac ataggctatt 60  
 gtgtttgcag cttctcccca aaaggctctt ggcagtcag cacttatcgg catgcacctc 120  
 actctttcca aaatggtcat attcattctt tctactaatc cattctgcta tggagtgtaa 180  
 cggactattg agcgccgttt gatactgat gtcctgcaa actaaacgaa ttgctctgaa 240  
 acaaactcca tgccattttt actccttaaa actttttgtg ttgtaccaag ctgatttcca 300  
 ataaaagtat gtcactctct gaatatttta aaagcttcta atgtgttatt taaaacatac 360  
 agccat 366

<210> 5332  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5332

agcttgttgt gtcttatcca atgantttct ttgatagata gtaggcaa at tacaatttga 60  
 tttgatagct cactaagatt gatcttatag agattgcctt tcctcttagt agaaaagagc 120  
 ttagtcccat ttttattttg gacaatacac ccttctttgt taaaggaaac atcatttcca 180  
 ttgccacata attggcttat gctaagcaaa ttatgtttga gcccttcaac aacaaaaaaa 240  
 aaaaaaatct ataagaggat ggggatgaat acttatctta tgtactcctg ttatcttcac 300  
 tttatgattc ttgtcaaaaa agactattcc accatgcata ggggttaggc attggaagat 360  
 acacctttct cctatcttgt gtcatgagca ttcgttgtcc aaataccatg aatgatgtat 420  
 ctttcttttg gttaaagata tatgcaacaa gaat 454

<210> 5333  
 <211> 270  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5333

ttggagtntc caagtgccaa ttcgactgct tctttagtcc agtcttcttc tagcttcaat 60  
 ccatcagtgg gctttccttc tgtgtccagc atcttgggat gttcccagcc tttgatgaca 120  
 gctttccagg ctctgctatc cagtgatttg aggaaggcca ccatccttgc tttccagtat 180  
 tcatagttagg ttccatccag gattggtggg ctgttcactg gtccactttt tttctccatg 240  
 ttcatcagaa tttatcttcc tagatctcac 270

<210> 5334  
 <211> 311  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5334

tcttagatct gtcagatcca agcccagatc tatgtctaga tttaaaaata gtattagagg 60  
aagttgctca acttccccaa cctccaacac taagtttcct tcgtcggtgg agacgtcaag 120  
gagttcatgt tgattcattc ctctattgac aacaagattc aggccatttg caaagggttg 180  
actgagttgt ggaaacaagg aaaaatctag ttacgtgcat ggaaatntga acccaaaacc 240  
aaagatttga gaataattcg tttctttgat ttgattttgg ttgaatttct gtcatgggtg 300  
gaataatgca t 311

<210> 5335  
<211> 382  
<212> DNA  
<213> Glycine max

<400> 5335

gtggaaaatt ttggcacgga atcatcagag gtggctaagt cttaagatgg tcgcgttggt 60  
ggagtctcca aaatgatatc ctcatctttt tcacggtcag ctgagagagc tccttccttt 120  
aacaacgaga cacaaatagt gttatgcctt gtggacgggt gccactctga tctcagtaac 180  
tgcaaagact atcatagacg ccataaggtc cgtgaagtcc attccaagac tacacaggtc 240  
acaattggag gtcagaaaca aaggttctgc cagcagtgtg gcaagtacat gtttcatatg 300  
aaatttctca tcatttgctc tcttaattaa tgttggtact atttttttaa tttggataat 360  
gtataatttg atcacccgga gt 382

<210> 5336  
<211> 409  
<212> DNA  
<213> Glycine max

<400> 5336

agcttcacaa aagtttatgt ggcttgaaac aatcaccgtg tcagtgggtac aagaagttta 60  
atgagtttat gagcaactca ggattcaaca gatgtgacat ggaccattgc tgctatgtta 120  
agaaatatac taatagttat gttatccttg tcgtgtatgt tgatgacatg ttgattgcag 180  
gatctagtat ggcataaatt aacaagttga agcagcagtt ggcagaaaac tttgaaatga 240  
aggatcttgg tccagctaaa caaatccttg gtatgagaat tcttagaaac agatcagaag 300  
gaattttgaa gctgtctcag gagaaatata tacacaagtt gcttgacagg ttttaccttg 360

gagattctaa gaccaagaat acccctttag gatctcattt gaagttttt

409

<210> 5337  
<211> 441  
<212> DNA  
<213> Glycine max

<400> 5337

agcacatgct aacgacaata acatttcact cggaagttcg attgagtccc gtaatatac 60  
gagacgctcg aaattttaaaa ccgaagctcg tagaaaattc taacgaggat aacattacac 120  
tcggaattcc gattgagtcc cgtaatatat cgagacgctc taaatttaaa accgaagctc 180  
gtagcaaatt ctgacgacaa taacttttca ctcggaaggc cgattgagtc ccgtaatata 240  
tcgcgacgct cgaaattgta agccgaagct cgcagcaaat gctaacgaca ataacatttc 300  
tgtcggaagt gcgattgagt cccgtaatat atcgagacgc tcgaatatta aaaccgaagc 360  
tctgtgcaga tgctaacgac aataacattg cactcggaag ttcggttgag ttccgtgata 420  
tatcgagacg ctcgaaattt a 441

<210> 5338  
<211> 382  
<212> DNA  
<213> Glycine max

<400> 5338

tgacaggttc aggtgtaggt gctgctactg gtggaggcac ttgaatttgg ttgccggacc 60  
tcaaggatgat ggcactcata tttttcggat tctgcacagt ttgtgaaggc aatttgtcag 120  
aattttggga ctgagcttgg ttcaactgag tagccatatt ccccatctga tttgtcagaa 180  
tctgaataga ggctcttctc tcttctgtaa attgcatatt ctggatggtc atttgcctca 240  
ctaaatcttc taaggaaggt tgaggagggg cctcaattgg ttgttgcctt tgttgttgtt 300  
gttgttgctg ctgctgctgc tgcattggag gaggaacata tggcttgctt ggaccaacaa 360  
cattctggaa aggagggaca tg 382

<210> 5339  
<211> 435  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5339

agctntcact cgcattgtccg attcaggegc atattcgtatc gagacgctag aaatctaaca 60  
aaggaagctc tcgagaaatt caaatgggtca taacttttca ctccgatgtc cgattcaggc 120  
gcataacata tcgagacgct cgaaattgaa caacgggttt ttccgagaaa ttcaaattgg 180  
cataactttt cactccgatg tccaattcag gacatcgtgt atcgagacgc tagaaattgg 240  
acaatggaag ctcttgagaa attcaaattg tcataacttt tcactcggat ggccgattca 300  
agcgtataca atattgagac gctcgaaatt gaacaacgag agctctcgag aaatctaaat 360  
gggcataact tttaactcgg atttccgatt caggtgcata acatatcgag acgctacaaa 420  
ttgaacaacg gatgc 435

<210> 5340  
<211> 294  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5340

tagctccaaa ctctntgggt ggaggatgca tgaacagcgc taggcaatga cattcatggg 60  
gctccgaaaa aagtggagaa tggaggattg gactataggg tccacactag gcaatcatga 120  
agcataactc caaactcttt ggggtgatga tgcattgaaca acgctaggca atgacattca 180  
tggtggctccg aaaaaaagtg gttggcagga ccgaacggtc caccgggttt ttccacctaa 240  
aaggaaaaca tgctttttgc aaagaaaaat aaatcattca cgagagcacc atat 294

<210> 5341  
<211> 288  
<212> DNA  
<213> Glycine max

<400> 5341

agcttcatgg atatttatgt gatgacatgg ttcttggaaa gacacttcaa gcatcagcaa 60  
ttgtggcctc tgatatagct gagcatcgaa cttcaattgg gaatgaggat cttctgccat 120  
ctttaattat ttgcccatca actctagttg tgcaactgagc ctttgagata gagaagtata 180  
ttgatgtttc tggtatctct agtcttcaat atgttggctc tgctcaagag cgaatgcttc 240

ttcgggatca tttttgcaag cataatgtca tcataacatc atatgatg

288

<210> 5342  
<211> 421  
<212> DNA  
<213> Glycine max

<400> 5342

agcttaataa gtacatctat ggattgtaac atgctttctt ccaatgggat ctaagatttc 60  
atgaggtcat ttcttcattt agctttgaag agaatgtcat ggatcactgt atataccaga 120  
aggtcagtgg gagtaagatt tgtttccttg tattatacgt agatgatatt ctgctcgcaa 180  
ctaatagataa tggatgcta tatgaggtga aacaatttct ctcaaagaac tttgatatga 240  
aggatatggg agagggcatct tatgtcatag gcataaagat ccatagagaa agatctcgag 300  
gcattttagg cttgtctcaa gaaacctata tcaacaaagt ttagagaga tctaataatga 360  
aagaatgttc accaagtgtg gctcccattg tgaagggtga caaactgtc ttgagtcaat 420  
g 421

<210> 5343  
<211> 430  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5343

agctnttata catggcctcc taggtgggtga gtcttttcta tactcatctt ctccttgaag 60  
gggcgtctcc tctctctctt ccttctccat tctgtgcca ttcattctcc aagaagcaaa 120  
ggattccatt gatgaagaag atcctaggcc tacaagctcc aatggagcta acatcaaaat 180  
atatcacatc ccattagcta aaaacacagt ttttcttgaa aaccagcatg cacaaggata 240  
gacatacatc ccataattg gttcactgac cccaactatg gtatcaaaaag ctgtaaacia 300  
acaataaact cccctcactt atctatatct ctctgttagt tccatgcggt gttgttctaa 360  
gatctcttan gttcacgtcc gttcgtcaa acgtagagct ctatatacca aatcanagat 420  
aattcagtat 430

<210> 5344  
<211> 346

<212> DNA  
<213> Glycine max

<400> 5344

cgccagcttc tgttttcaat acgagcgtct ccatatatta ctttctcaa tccgacatcg 60  
gagtaaaaag ttattgtcgt tagaatttgc tcagagcttc tgttctgaat tttgagagtc 120  
tcgatatact acggaacaca atcggacatc tcagtaaaaa gttattgtcg tttgaatttg 180  
ctcagagctt ctgttcttaa ttacgagagt ctcgatatat tacgggattc attcggacat 240  
ccaagtaaaa agttattgcc gtttgaattt gctcaaagca ttcgttgtca attacgagcg 300  
tctagatata ttacgggatt cattcggaca tccgagtaaa aagtta 346

<210> 5345  
<211> 315  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5345

tccattntca atttcgacca tctcgatata ttaccggact catccggaca tccatgtata 60  
aagttattgt caattcaatt tactcaaggc ttcggatctt aattttgagc gtctcgatat 120  
attacaggac tcattcagac atccgagtaa aaagttattg tcgtttgaat ttgatacaag 180  
cttcggtttt caatctggag catctatcga taaattatga cactctgtcg ggcatccgaa 240  
taaaaagata ttgtcgcttg aattctctga gagtttccgt tttcaatttg gagcgtctct 300  
ctatattacg ggact 315

<210> 5346  
<211> 428  
<212> DNA  
<213> Glycine max

<400> 5346

agcggatgct caaaacatat gactggagat gtatcaaatt ttacacatat ctctccaaag 60  
aaaagcgggc acgtaacata tggtgacaac aacaaaggta gaatccttgg agttggtaaa 120  
ataggtacaa attcttcaaa ctccattgaa aatgttctac ttgttgaagg ccttaagcat 180  
agcctgctta gcgttagtca attatgcgac aaaggctatc tagtatcatt tgattctcaa 240



aattgtctta tagaacataa gcatgacatt aatataaagc atgtaggaca tagagtcaat 300  
aatgtttaca tgatagactt aagcataaaa ctagaaaaca atcattgctt tcttagcaaa 360  
gatgatgatc catggttatg gcataaaaga attgctcaca taaacatgga tcaacttaa 420  
aaattaat 428

<210> 5347  
<211> 275  
<212> DNA  
<213> Glycine max

<400> 5347

agcttacaaa atttatatgg cttgaaacaa gcaccgaggc agttgtacaa gaagtttaat 60  
gagtttatga gcaactcagg attcaacaga tgtgacatgg gccattgctg ctatgttaag 120  
aaatatacta atagttatgt tacccttgct gtgtatgttg atgacatggt gattgcagga 180  
tctagtatgg cagaaattaa taggttgaag caacagttgg cagaaaactt tgaaatgaag 240  
gatcttggtc caactaaaca aatccttggt atgag 275

<210> 5348  
<211> 442  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5348

agcttatcat gatcatcata attattggct atatgaaggt agacaaaaga tgcaacagtg 60  
gaatctgtaa ctgctttact tttcagcatt ttcccataac aatgatcaga attctgactg 120  
aaattattaa actgagcatt aagaggaaag tcaactaggaa gaagccagga agaactctgga 180  
aatggctcac aaaagagatc aaccatatcc gctccagggt caaccagtag aacacggtta 240  
gtgaggagag catagagaaa agcagaagct aggggtcaaaa tcctattccc taagccacta 300  
aacgaaatcc atacaacata ttacactct gnaggactca gtaaatagacc accagaccta 360  
agttgttcaa ctgttttgtt ataggaatca gcgtaaggct cacattgttt gtgctgagct 420  
tcatattttc ttaacctaga aa 442

<210> 5349  
<211> 448

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5349

agcttcctcg tggcttcttt gagaagctnt ctcaagaggc ttctttgaga agctagatcc 60  
 ttatctatcc acacccctct tttagctgaa ttaacctct taaaaataat tacggatgaa 120  
 aataacgcaa caaataatca aacatcaaac ataattacta ataatatata gatatatata 180  
 tatcagggtt ttacaactct cccacccttt tagaaatttc gtactcaaaa tttaccttac 240  
 tcaaacaagg atgggtgagc ttctcgcatc tgactttcta attcccacgt ggcattctct 300  
 cctgatgcac ctcccagat caccttgacc aacgaaatct ctttccctct taagtgtttt 360  
 gttcgctat ccttgatcct canaggcaat gtttcatatg tcaaattctc cttcacttgt 420  
 acatcatcca attcaatcac atgggatg 448

<210> 5350  
 <211> 619  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5350

tctntgagaa aaagtcctat ggaagcgaga gcttagctac acacaccct ctcataacta 60  
 agctcacctc cttgagaagc ttgcttcgga agattcctaa agaagctaga gcttaactac 120  
 acacaccttt ctaatagcta agctcacctc cttgagatga gaaactagag cttagctaca 180  
 cacccttat aatagctaag ctcccccca tgacaaaata catgaaaaaa caaaaaaag 240  
 tccctactac aaagactact caaaatgcct cgaaatacaa ggctaaaacc ctatactact 300  
 agaatggcca aaatacaagg cctaaacgaa ggaaaaacct attctaatat ttacaaagat 360  
 aagtgggctc atacttagcc cctgggctcg aaatctaccc taaggctcat gagaatccta 420  
 gggccttccc ttggatctct agcccaatct acttgagtc ttttatccaa tgcccttgcg 480  
 gggtaggatt gcatcacaaa gggaaacaac atgttttaat tctgttatnt tctaattaaa 540  
 aattgcttgc tgtttaaatt acaaaaacaa accccccccc cccaatttgg tactatttta 600  
 taactatcta ttatgaacg 619

<210> 5351  
 <211> 482  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5351

tttgtgtga tttaatctca acagttccat ttcgtgttcc tgtaactttc caattaatgt 60  
 agcaagagac atgttagtta aatatcgcaa ctacagtaatg gctgttacct taagttgtca 120  
 ttctctgctt aaacatctca atactttatt tatgagatct tcatttgga aaattttccc 180  
 taaagatgca agatgattta ttatatgtgt aaaccttttt tgcagtgtct gtatactttc 240  
 atttgaattc attctaaata attcatactc atgagttaat gtatttatcc tagatctttt 300  
 cacatctgtt gtgccctcat gtgttacttg tagggatttc cacatttctt ttgcactttt 360  
 ancaattgat accctaaagt actcatccat tcttaaggca gatgtaatta tatttttggc 420  
 ttttaagttg tattgcacta atctcttttc ttcgtcactc cattcttccc tangcttttc 480  
 ta 482

<210> 5352  
 <211> 528  
 <212> DNA  
 <213> Glycine max

<400> 5352

agcttcaagc cttgatcaaa ctgaagatcc ttgggttcctt acaatatttt ctgggcctgg 60  
 aagttgcaaa gtccagcaag ggcattgttt tgactcagag aaaatatgcc ctttctcttt 120  
 tagaggatac tggttttctt ggctgcaaac catcctctct tccaatggat ccaaatttaa 180  
 agctcgacat gctcagtggg gatttgctgc ccgatccctc aatgtacagg tgcttacttg 240  
 gtcgtctcat gtacctcact atttcaatgc cggatattac attttctgtt aacaagctaa 300  
 gccaatacat gcagcatcca agaatactc atctaaatgc tgtgcatcat ctctacaat 360  
 atatcaaggg cactccgggt cagggtcttc attttccage cagtaactcc ttcaacttat 420  
 ctgcatatgc acatgctgat tgaggaggat gttttgacac acgcaggteg acatctgggt 480  
 catgtgtgtt tctacgagat gctttattat caagggacat caaaaaag 528

<210> 5353

<211> 567  
 <212> DNA  
 <213> Glycine max

<400> 5353

cttgatcttt cctcagttct ttaacaagct ttgtacaata tacttggcct tcatttaact 60  
 gtctttgggc ttggcggcca cgctcaacaa agtactttcg acacctactg tacgttgatt 120  
 tcaccaatgc cgttatggga atgttgcgac aatcctttaa aaccttattg atacattctg 180  
 agaggttcgt tgtcatgtgg ccatatcgac gtccttctct atcgtaagcc atcgccatt 240  
 tttcttttga gatgcatca atccatgttg ctatggctgg actcacttca cgaaattttt 300  
 ctaaattttt atcaaaaatg tgcttgcaag gagtataggc tgcataaaat tagttatgaa 360  
 taacaattta cagtataaat gaaagtaaaa taaacgtgac catcaaatat gaaattttac 420  
 ccaatttctt caacatttct ttttgtttgg cattattgaa ttttcgattg aagttgcttg 480  
 ctatgtgtcg cacgcagtaa acatgataac cgtggggagg ttgccagcca agtgctttgt 540  
 tagcgacagc ggactttata ctgcgct 567

<210> 5354  
 <211> 373  
 <212> DNA  
 <213> Glycine max

<400> 5354

agcttgaagg tgtgtagccc accatctttt catagtagaa aactggtaat gtgtctacta 60  
 tcattgttat catttttttc tccgtcactg aggtgccact tgagctgcca ggtctctcca 120  
 cctttgggcg cattctttga aagatctgtg cccctttttg cacatgttct gtagttgcat 180  
 cctatccgga accatatcaa aattttactg atattgtcta acgaaggcaa ccattacgtc 240  
 cttccaagaa tggactcggg aaggttccaa gttagcgtac caggtaacag ctaccccagt 300  
 aagactttct tggaaggaat gtatcaccaa ttcctcatcg tttgcgtatg ccccatctt 360  
 ccaacaatac atc 373

<210> 5355  
 <211> 587  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5355

tttatatata tatatatata acaatgatct tactgttaga aattattact gggtgttgat 60  
gtcaataaat gatagcatca taaaatatcg tcatcaaaag tgtcatataa acaatatttg 120  
attattgtaa aattaaattt tcatttttct acgtacaaaa aaaattcact tcgctttctc 180  
ccattaagtt tccatacttt catccattcc atagaaattt tctctatgtt ctcttaagct 240  
ttcacaagta aaattagatt tcttccctct ctcatcatt aactctaagc tctctcattc 300  
tttttcttga gacatgataa taattataat aaattacact attttatgaa attatataaa 360  
taccttttac tttttttcta cccctacact aacatctctt aattattgaa aaatatatac 420  
cgacatgaca tctttntatt cattacatta actctcctta attatttgaa aaattctaca 480  
ccaaactccc caaaggagag gttattataa atattaaaac aacatgaagt atttgtgtaa 540  
cttcacaaaa atttatagaa tattgtgtta atttactctg ataatat 587

<210> 5356  
<211> 558  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5356

agcttcccaa gtttttaagt tcttctcaa aactgtccta agcaaagttc ccaaagtcct 60  
attaacaact tccgtttgcc catcggtttg tgggtgacaa gtggttgaaa ataacaattt 120  
agtgcccaac ttgctccaca aagtctcca aaaatggctt aaaaacttag agtccctatc 180  
actaacaatg ctctttggca gaccatggag tctcacaatc tccttgaaaa acaaatcagc 240  
cacatgggaa gcatcatcaa cttttttaca tggaataaaa tgagccattt tagaaaacct 300  
attaacaacc acaaaaatgg aatctctacc attgcttggt tttggcagcc ccaaaacaaa 360  
atccatggat aatcaatcc aaggatactc cggaattggc aatggagtat acaatccatg 420  
aggctttacc ttagactntt gccttttaca tacaatgcaa tggtcacaaa atttctgcac 480  
atcctttttt atatgaggcg ccaataaaaa tggtcttgta atgtttctaa agtcttttgg 540  
accccaaat gccccatt 558

<210> 5357

<211> 538  
<212> DNA  
<213> Glycine max

<400> 5357

agctcgtaac aaatcttcta cacttggagt gatcacatga agtcctcttg aacccttacc 60  
accactctg tcatcatgcc gagactcagg aagcccaacg ggtttagcct tctctaagta 120  
ttctgaacaa aattcaatgg cttctttctac aatgtacctc tcaacaatag atgcttctgg 180  
acgatatata ttctctgtat accctttttaa gatcttcatg tatcactcaa ccgggtacat 240  
ccaccataga taaacaggac cacaacattt gatttctctg accagatgca caatcaagtg 300  
aatcatgatg tcaaagaaaag cagggggaaa atacatctcc aactagcaca gtataattgc 360  
ggcctcattt tccaactcat cagacttgac tggatcaatg actttgctac atatagcatg 420  
gaagaaaaag cacaggcgag ttatcgctaa actgaccttg tttggcaaga tgtcttgttt 480  
agccacgact aacaattatt ccatgagcac gtgaaaatcg tgagaccttt accctacc 538

<210> 5358  
<211> 499  
<212> DNA  
<213> Glycine max

<400> 5358

tgggtacttct actgaagctg agtttctacc ctctctctgt cctgacatag aatctctagt 60  
gcagctgaag gatgctatag ggttcttgat ccttcagatt cagtctttgt ttcttggttg 120  
ttcttttttct tggatttatc tctcattaaa aaaatatcaa tgaaaaatat gatggattaa 180  
ctgggttttcc tttttctggg atcggagaaa agataatgat tttcattggg ctcatatttc 240  
agtatttgga tttgtacatt ttttattgcg tattatctat tcattcatta tattaggaaa 300  
gttttaggttt ttttaaataa caatatttga tgcaaaaata aaataaaatg attagaacta 360  
aaggatttaa ttaataatta ttatttcatt tatcatttat aattatttgt atgtacatgt 420  
attataatgg tttaatattt attaatatgt aattttcgct aataccatat acaatacacg 480  
tcttctataa taataaaaa 499

<210> 5359  
<211> 502  
<212> DNA

<213> Glycine max

<400> 5359

tctagatgag ttatgtctgc gaatcggaca tcctgtgaaa agttatgacc atttgaattt 60  
ctcagagtgc tccgttggtt aatttcaagc gtctcgatat tttatgtcct caaatcagac 120  
atcggagcga aatgttatga ccattcgaat ttgtcgagag cttccgttgt tcaatttcga 180  
gcgtctagat gagttatgtc accgaatcag acatctgagt gaaatgttat gaccattcga 240  
atgtgtcgag agcttccgtt gttcaatttc gagcgtctag atgagttatg tcaccgaatc 300  
ggacatccgt gtaaaaagtt atgaccattc ggctttgtcg agagcttccg ttgttcaatt 360  
tcgagcgtct cgatatatta tgtccccgaa tcggacatcc gtgtgaaaag ttatgaccat 420  
tggaactttgt cgagagcttc cgggtgttcaa ttttgagccg tctagatgag ttatgtctgc 480  
gaatcggaca tcctgtgaaa ag 502

<210> 5360

<211> 567

<212> DNA

<213> Glycine max

<400> 5360

tggtgacaaa gctgaaaagt gtgtctttgt tgggtgtaagt gaaacatcaa aagcatataa 60  
gttatttaaat ccactaacia agaagattgt gaccagcagg gatgttattt ttgatgaaga 120  
caacacatgg gactggaatg agcagcaacc caattcaatt attgttgaca atgaagatgt 180  
aaaagaacta cagctactcg taaacattgt cttaacatct ccaaataag ctcaaatagc 240  
tcctgagaca gagatttcaa caccaacaaa tgctggaaca acagatgcaa ctagacatgg 300  
caatggggcg ggtcgggtac ggggtattgtc tccccaatcc cttaccccga cgcctcgaca 360  
tatccccata cccgtacccg atacccgacg ggtttgagtt tattgtccca tccccgtacc 420  
cgtcgggtat cgggtattcc caaccccggt ccacacacca tttagaaaaa tatttttttt 480  
ttgtaaaaaa tattaataat ttgatttaaa aaaaaataaa ttgattgtaa acattttttt 540  
ttactactta tatataataa tttatta 567

<210> 5361

<211> 502

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5361

agcttcgacc tatgtgcatg aattgtgtgc catcacaact gccgttaaga agtggagaca 60  
ataccttctt ggccatcaat tcatgatctt gactgatcac agaagtctta aggagctcat 120  
gactcagatt gttcaaactc cagagcagca aatgtatttt gccaggctta tgggggatga 180  
ctactccatt caatatcggc cggggagcac taatttggtg gctgatgcct tatcgcgctt 240  
gaaggaggga tcagaaggaa ccatgttatt actatctgta ccttgccctga cattttttaga 300  
tgaattgaag aagcaattaa aacaagaacc agcctttatc gaattcagga agaatatatt 360  
ggcccaaccc acagccttcc ctgaatattc tattactcgt ggattgattn tgtaggggaa 420  
tcgtatctgg ttactagagg atatccccct cattcagact ctgttaatgg agtatcattc 480  
tactccaaca gggggtcaca tg 502

<210> 5362

<211> 592

<212> DNA

<213> Glycine max

<400> 5362

agcttcatgg tgaatcaaag gtgattcaaa ggtgttttga tgataacaaa agatgatgac 60  
aaaggatgat acaaaaagct caaagatcaa tcaaagaaca actcatgtga tcaagttaga 120  
ataaagaaca attcacgagt tcaagataga atcaagagaa ggcttaatca agctaagtat 180  
gaaaagtttt tctcaaaaat tgagtagcac atgatttttc tcaaaacatg tttaccaaag 240  
agtttttact ctctggtaat cgattaccag attggttgtaa tcgattacca gaagcaaaat 300  
tgttttgaaa aagttttcaa atcgaattta caacgctcca gtttaattca gaaagctgta 360  
atcgattaca atgttttggc aatcgattac cagtgccttt gaacgttgaa attcatattc 420  
aaaagtgaag agtcacatct tttcacataa aagctttggg taatctatta cactgatttg 480  
gtaatcgatt accagtgagt gtttctgaat aaaatcaaaa gatgtaactc ttcaaatagt 540  
ttttgacttt ttcaaattgt ttttaggttt tctaaatgca taactttcta at 592

<210> 5363

<211> 562



<212> DNA  
 <213> Glycine max  
 <400> 5363

agcttggttta actgtcctgc tgcaaagcaa tgttataccc agctggaaaag atgtatctcc 60  
 tccgatgagg aaacaatcta tgctgcttct gcggcagaca atctccagta gtaccatccc 120  
 aaaactgtaa atgtcaaggc ttactgatac tggcgcaccc ttctgccatt cagggtgtcaa 180  
 gtacttgctt gtcccatcat cctcttttct cattcttgaa tggcagact ttagcagcct 240  
 tgccaatcca aaatcagaga tctttgcagt ccacgctcca tccataagta tattccgagg 300  
 atttatgttg caatggataa tacggacctc acactcttca tgtagatata gcactcctct 360  
 ggcaatgtct aatgcaattt tcagtgtgtc tctccgagat atgtgtttct catcgttgaa 420  
 gagaatactt gcaagagacc cggtgtgat gtattcgtaa acaggaagct tcccagatcc 480  
 attgatgcaa aaaccaatga gcttaaccat attcctatga tgtgttcgag caatgttagt 540  
 aatatcattc aagaaaacac tc 562

<210> 5364  
 <211> 661  
 <212> DNA  
 <213> Glycine max  
 <400> 5364

agcttaatag taaaattaaa aaaacatacg aaaataaaaa atttacaaaa gccaaaaaca 60  
 aatatttttt ttctaatttt tactaataaa aaaattagaa agacttgtaa tcattggttg 120  
 ccacaccata ttaatcaatt atccatttaa tgtatgatca acataataaa aatagaagag 180  
 ttgttcaaag aatgtttgta tcagaaaatt tgaatatata tccaaattaa gatgttttaa 240  
 atcaagatga aattgagata aaatatatcc caaccaagta taattaaaaa tgatgttata 300  
 atatttttta atcatatgat atcaatatac cattttaatt acatatgtta taacataaat 360  
 tggacacatg aaattatgat tcatttttat tttaaaagat ataataataa taataataat 420  
 aataataata ataataataa taataataat aataataata ataataataa tatatgaact 480  
 gaacacacat acttaacata aattgagcat ataacaacgt tagttattca tttgtccgat 540  
 agatattcat aagataaatt tatgggatgg ttaatcatta atttttttat gtttaaagac 600  
 tcttaaatat ttatatatta catthaattta tctacaaat taataaatga tgtaaagt 660

t

661

<210> 5365  
 <211> 549  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5365

tcattggtgaa tcaaaggtga ttcaaagatg ttttgatgat ttcaatgatg acaacaaaag 60  
 atgatgacaa aggtgatgaa caaaaagctc aaagatcaaa gaacaactca agtgaatcaa 120  
 agaacatctt aagagaatca agaacaagtc aagagttcaa gaatcaagaa gaattcaaga 180  
 ctcaagaaga aagcctagaa tcaagaatca agattcaaga tctcaagaat caagatcaag 240  
 attcaagaat gaagaaaaga ctcaatcaag ataagtatta caaagttttt tcaaaaacttt 300  
 gaatagcaca tggttttttg acaaaaacttt taccaaagag tttttactct cttgtaatcg 360  
 attaccatat tgttgtaatc gattaccagt agcaaaatga gtttgaaaaa gttttcaaac 420  
 tgaatttaca acngtccaat tatttttcaa agactataat cgattacaat gttttgtaat 480  
 cgattactag tgccctcgaa cgttgaaatt canatttaat gtgaagagtc acatcctttc 540  
 actcaaagc 549

<210> 5366  
 <211> 552  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5366

agcttgaagg caaactggat gcattggtta acttggttaac ccagctggcc ttgaatcaga 60  
 aatctgtacc tgttgcaagg gtttggtggtt tgtgctcctc tgctgaccac catacagacc 120  
 tttgcccttc tatgcagcaa cctggagcaa tcgagcaacc tgaagcttat gctgcaaata 180  
 tttaaatag acctcctcaa cctcagcagc aaaatcaacc acaatagaac aattatgacc 240  
 tctccagcaa cagatacaac cctggatgga ggaatcaccc taacctcaga tgggtccagcc 300  
 ctgagcaaca acaacagcag cctgctcctt ccttccaaaa tgctgcaggc ccaagcagac 360  
 catacattcc tccaccaatc caacaacagc aacaacccca aaaataacca acagttgagg 420

ccccccaca accttcctc gaagaacttg tgaggcaa at gactatgcag aacatgcagt 480  
 ttcagcaaga gaccagagcc ttcattcaga gcttaaccaa tcagatggga caattggcta 540  
 cnccaattga at 552

<210> 5367  
 <211> 564  
 <212> DNA  
 <213> Glycine max

<400> 5367

tagccctaga ggggatggac cttttcaggt tttggagagg atcaataaca atgcctatag 60  
 gttggacctc ccagaagagt atggagtcag caccactttt aacatttttg atttaactcc 120  
 ttttgcaagt ggagctgata ttgaggagga ggaactaaca gatttgaggt caaatcctct 180  
 tcaaggggaa ggggatgatg caatcctccc taggaaggga ccaatcacta gaaccatgag 240  
 caagaggctc caagaagatt gggctagagc tgctgaagaa ggccttaggg ttctcatgaa 300  
 ccttagggta gatttctgag cccatgggcc aagggtgggt ccaattatct ttgtacatat 360  
 tagactagga tgtcattata tttggctcct gtatttaggg ctccatattg taggtagggt 420  
 accctagaaa tataggattt ttcagccctt gtatttttgg gcacctagac taatttttgt 480  
 atttggggta gttctgtaat ttcacatgca ctaagtggat atttgatgtg tgtgggtgga 540  
 aataaaatta attgaattgg taga 564

<210> 5368  
 <211> 443  
 <212> DNA  
 <213> Glycine max

<400> 5368

tcccttttct tgaagcaatt ctgggaacta actccccctt ttttctgcca tctctcttta 60  
 attttatata catatatatt atatcttttt cctacatagc taacttttcc ctcttacgca 120  
 tacatataga tatttttatt tcaattgaga tgtttattga gcacacggat tgttgaattt 180  
 taatcaagta tgtgtgtgtg ttatgagcag ccttggcagc tattggtgag aaggagtgg 240  
 acttctatgt gccagagat aggaagtatc gcaacgggtga tcgtcccaat cgtgttacta 300  
 cctctgggta ttggaaggca acaggaactg atatgatgat ccgaaccgag aattttcgc 360

ctattggcct caagaaaacc ctaattttct attctgggaa agctcctaag agcatactaa 420  
ccagttggat aatgaacgag tat 443

<210> 5369  
<211> 545  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5369

agcttgatat gtggcactct atattacaga aacaagcccc cacaaggaag tattttaact 60  
cccgtggctc aggttcttgt cgctgcattt tccaaaagaa accttccatc ttccccatca 120  
tccatgatca gagtgggaaca agttgagcaa gtgaagatat tgctatctgt tattccgata 180  
ttctcgtgca ccatcgtttt caacaccatc ttagcacaac ttcagacatt ctcagtccaa 240  
caagggagag caatggacac ccatctcacc aaatccttta atatccctcc cgctccctt 300  
cagtcattc cttacatttt gctcatcttt ttagttcttc tctatgacac cttctttgtc 360  
ccatttgcca gaaaattcac cggccatgag tctggaatct cacctttgcg ccgaataggc 420  
tttggtcttt ttctggctac cttttctatg gttgcagctg ctctgttga gaanaagaga 480  
agggacgcag ctgtgaacca tcacaaaagt ttgtccatct tttggataac ccacaatact 540  
tgata 545

<210> 5370  
<211> 556  
<212> DNA  
<213> Glycine max  
  
<400> 5370

tgctaagtgt ttgtgtaagt gattctagca tcttagctag cagcttggtc tgtgccaata 60  
gtgcatcttg ggaagaaagc tctaacatgc ttctttttgt ggttacgtga gttttatcac 120  
gcagaatagc atgatcacta gcagccatgt tctctatgag ttccattgct tcttcaagag 180  
tcttcaattt aatttttcct ccaacagaag catccaataa ctgcttgaac tgcagtctca 240  
aaccatcaat gaaaatgttc agttgaatcg gctcggggaa tccatgagtt ggtgtcttct 300  
gcagaaagct acagaatctc ttaagcgctt cacttaggga ttcattctaga aattgatgaa 360

atgaagaaat agttgccttg ccttcagctg tctttgattc tgggaagtac ttcttcagaa 420  
 atttctctac aacctcttcc caagtcttta agttgtttcc cttgaaagaa tgcagccacc 480  
 tcttggttc tccagccaaa gaaaataaga acaagctaag ccgcactaca tctttcggca 540  
 cccctacaat tttcac 556

<210> 5371  
 <211> 533  
 <212> DNA  
 <213> Glycine max

<400> 5371

agctttcaat tttttcaagc attgaacgat tcttatgaag aattatacaa taaagacaat 60  
 gaagtatctt aggacaaata atgacttgga atcctgctct aatgaattca atgaattcta 120  
 gagagatgaa ggcattggca gataatgtat tctatgttat actccacaac ataaagtagc 180  
 tgaaagaatg aacaaaacct tggttgaaag ggccagatac atactatcga attcaagctt 240  
 gaataagagt ttttggaag aagtagtcaa caaacatgc tatattgtgt ttgacatgca 300  
 atcacgtaag tgaaggtaag ttagagccaa aagccaataa gagattcttt atgggctatg 360  
 aagatggagt caaaggatta tgagtctggt ctctatctaa aagaaagtca ttctgagtca 420  
 agatgttgac tttgatgaac cctctatgct gcattctaaa tatgatgaag atttggccaa 480  
 ggctaaggat gtcactaagc aagttgaagt taagagctcc acaatcaaaa aca 533

<210> 5372  
 <211> 275  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5372

ctatttatgc aaggacgcat ttgagtggc cctcgaatca caagatgctt tcgataccct 60  
 caaatccgct atgatcaaca cccagttct ggcccttccc aatttccatg aaccatttgt 120  
 cgtcgagacg gatgcttcan gcaactgccat gggggctgtg ctctctcagc aagggcaccc 180  
 attaccgttc ttcagcaaga acttcaccct tcgcctcttt atgcgtaaac ctatgtgagg 240  
 aaactccatg ctatcacatc cgcagtgctg aaatg 275

<210> 5373  
 <211> 595  
 <212> DNA  
 <213> Glycine max

<400> 5373

agcttgttta ccccatgttg aatttgctta caatagagct ggtcatagca ccactaattg 60  
 ttctcctttt gaagttgttt atggttttta cccactaact cctcttgatc ttttgcctat 120  
 gcctaattgtt tctgttttta agcataaaga aggtcaagaa aaggtggact atgtgaagaa 180  
 gcttcatgag agagtcaa atcaaattga gagggaaaat aaaagctatg ctaaacaagc 240  
 caacaaaggg agaaagaagg ttgtcttcga acccacagat tgggtttggg tgcacatgag 300  
 aaaagaaagg tttccagaac aaaggaaatc aaagcttcaa ccaaggggag atggaccatt 360  
 tcaagtgcctt gaaagaatca atgacaatgc ttacaaagtt gagctgcccg gagagtataa 420  
 tgtagtccc accttcaatg tctttgattt atctcttttt tgatgcagat ggagaatccg 480  
 atttgaggac aaattcttct caagagggag agaattgatga ggacatgttc tagacaaggg 540  
 caaggatcca cttgaagact ttgaggacct ttgacaaggc taaagcatgg aaagc 595

<210> 5374  
 <211> 462  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5374

tgagcccgtt tatctttgta catattagat taaggtttca ttatttttgg accttgtatt 60  
 tagggctcca taatataggt aaggtagcct agaaatgtag gatttttcag cccttgtatt 120  
 ttaggacact tagactagtt ttttgtatta ggggtagttt tgtaatttca caagcattaa 180  
 gtgaatattt gatgtgtgtg gttggaaata aatttaattg aattggtagg agcccaatcc 240  
 aattaaattt tagaggggga ggtgagcatt tgctagctac accccattgc cacatcatat 300  
 agtcacactn tgtgcatgtc cttcatgctt tacatgcctc atgacaccaa agcacactta 360  
 gtggagaatc ttggacttga tcttggatta gtgggctgaa ccataactaa nattcattaa 420  
 tcataattag tgaaatttgg ctccaaaatt ggctcccaaa at 462

<210> 5375

<211> 494  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5375

tactctaatt ttgaaaatat tatacctata tatggtgaca ttactagagc aatcaattta 60  
 tctaagaatc tcatgcaaca ttcaaaggct aagcatattg aaataaaata tcatttcatt 120  
 catgattatg tgcaaaaggc attttttata taaagtttgt aaacacaaat catcaatgga 180  
 ttggtatatt tactaagcct ttgtctgaag atcattttat ctgtaaagca tttgaatatg 240  
 atcgagctat tagattaatg ttgcattttc agaggcaata tcattttata acctctcatt 300  
 aatttgtttg gactaatgtg tgttcaagtg tacacacgga agagaaagcc tgttcacaaa 360  
 aataaaaacc cttcattttc tcttaaaagg gaaactaatt aataaaaaaa taaaagatc 420  
 aaaatcataa attaataatt ataggaagac anaatgtcaa ttaaatctaa aagtataatc 480  
 acccaaacag aaat 494

<210> 5376  
 <211> 571  
 <212> DNA  
 <213> Glycine max  
 <400> 5376

tgcttagtgt ctctgtgagg gtctctagtt gcttggctag gagcttgttt taggctagta 60  
 atgcgtcttg tgatgtgagc tcgagaagga tggcatggtg tgtaggctcg atcacgaagg 120  
 atggcatggt cactggctgt catattttcc atcaactcca tagcttcac cagtggtttc 180  
 agtttgatct tcccaccagt ggagggcatca tgtaactgct tcgaatgggg ccaaaagcca 240  
 tcaatgaaga tattgagttg aactgactcg ctgaaccagt ggggtgggaat cttccagagt 300  
 aaaccatgga agcgatcaag agcttcactc agtgattcat cagggaattg gtggaatgaa 360  
 gagatctcca cctttccctt agcggctctg ggctctagaa aatatttctt caaaaatttc 420  
 tccaccacct tttccattt ctgcaagcta tttcccttga acaagtgcag ccattttttt 480  
 gcttcaccag ccaaggagaa aaagaatagg ttgaggtgga tggcatcttt aggaacttca 540  
 tctgttttca ctatgttgcc aattttctat g 571

<210> 5377  
 <211> 548  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5377

agctttgtct ctttactaaa gcatgttcgc attgtagtga agaaaacacc gagactattt 60  
 tagtctcaca gttatctaga actacgtaga tctgagttcc tcattgagga tacgtaggag 120  
 caagagcctc gcttttgtcg gccgccccac aatctctgtc atactgaccc tgagggtcatg 180  
 tgacatgcag agacaaatta tgatcattcc gcacaccttt ttccatccag atacgatcgt 240  
 gtccgatggc acgcagagat aaattatggt cattctgcgc cttttgtcat ccagaggcgg 300  
 tgagcccgat gacatgtgga gacaaattat ggtcattccg caccttttgt catccagata 360  
 cgatcgtgtc cgatggcacg tatagacaaa ttatgggtcat tctgcgcctt ttgtcatcca 420  
 aaggcggcga gcctgatgac atgcanagac anattatggt cattctgcac actttttcgc 480  
 catccggaga cgatcatgtc cgatggcaca caaagacaaa atatgggtcat tctgcgcctt 540  
 ttttcac 548

<210> 5378  
 <211> 533  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5378

agcttcataa atccatcact tttaatatc tctacacaaa aacttaaagt atgttaattt 60  
 aacaattatt tgctcaaaaa ataaaaaatt agaagagaaa aattacaaat tcctctataa 120  
 tttaaccccc aaaatatact cataattagt agttatcagc ttccagatag tgggtatctta 180  
 agtttaatga tactattacg tgggtatggtt tcctagagaa caccgttgat cgggtgatct 240  
 acatgaaggt tagtgggagc aaatttgtaa ttttagtctt atatattgat gatattttgc 300  
 ttcttgctaa taatgttgct atgttacata atgtaaagaa gtatctctct aataacttta 360  
 aatgaaaga tatgggtgag gcattttatg tgatacgaat agaaatattc tgtaatagat 420  
 cacaaggatt gttgtgattg tctcagaaag gatatatcaa taaagtttta gggagattca 480  
 aatggaaaa atgcnttgga gggattgtta caatacaaaa aggtgacaag ttt 533



<210> 5379  
 <211> 560  
 <212> DNA  
 <213> Glycine max

<400> 5379

tactaagcct ctaaaatcca ttattccaag aggagataat ccaaattgat ttattttttt 60  
 tgaagaaggt agtcaatta ggggtgcaggg ttactatttg ttcacttgat ataaatcaag 120  
 aagcaaaaac aaagtgaaga aaatggaata agcaacatac atatatgggtg tatccctacc 180  
 aaacttcttt tgattaaata atccagaaag aagcttgatg taacctccac cacattcaat 240  
 ctcttgctca aattttacag aatactgaaa gaccaatatt ttgttcttgt ttgtgaattc 300  
 tgggtattttt gcagaaatgg aaaagtgttt ggcattcactc gatgtttgaa tacctacaat 360  
 atcctacaaa atgacaacat gttacaaaac caaccaaatt cctgtcacta cccattttga 420  
 catattaaga aaggaaacaa atacaagttt tattttttgtt catattaaga aaggaaacaa 480  
 atactaccac ttgtgtatat ttcatttttt cttgcctttt atttttaaaa ttgatatact 540  
 ttactaata attacaaaaa 560

<210> 5380  
 <211> 535  
 <212> DNA  
 <213> Glycine max

<400> 5380

agcttgaaga ccagatgggt tcaatgcttt attcttcaag aaggcttgga atatcattgg 60  
 tgatgatatc tttgaggcgg ttaatgaatt ctttacaact ggaaaaattt taaagcagat 120  
 caaccatgct atttttgctc ttattcctaa gcatgatcag gcctcccaag ttaaccattt 180  
 tagacacata tcttgttgta atttattata caagattgtg tctaaaattc tggccaaccg 240  
 catagcccca gtgcttgaga ctattattgg ggaaactcaa actgccttca ttaagaacag 300  
 aaagatgatg gacaacatct tctcgttca agagattttg cgcaaatatg cacggaaaag 360  
 atcctctctg aaatgcctcc tgaaaattga cttgcataaa gcttatgatt ccatttccta 420  
 ggaattcttg aattggatgc ttcagtccat tggcttccca acccaattct gtactttgat 480  
 catgaaatgt gtttctttca ctcccttag tgtgacagtc aatggattca attta 535

<210> 5381  
 <211> 592  
 <212> DNA  
 <213> Glycine max

<400> 5381

agcttatgct gcacacatct acaatagacc tcctcaacct cagcagcaaa atcagccaca 60  
 acagaataac tatgacctct ccagcaacag atacaatcct ggatggagga atcatcccaa 120  
 ccttagatgg tcgaatcctt cacaacaata gcagcaacaa caacagactt attttcaaaa 180  
 tgctactggc ccaagcagac catacgtacc tccaccaatc cagcatcaaa aacaacaaca 240  
 gccccagaaa caacaaacag ttgaggctcc tccgcaacct tcccttgaag aacttgtgag 300  
 gtaaatgatt atgcaaaaaca tgcagtttca gcaagaggcc agagtctcca ttcaaagctt 360  
 aactaatcag atgggacagt tggctacata gttaaataca caacagtccc aaaattttga 420  
 tagattacct tctcaatctg tccagaatcc caaaaatgtg agtgccatta cattgaggtc 480  
 aggaaagcag tgtcaatgac ctcaaccagt agcatcttcc tcatccgcaa tgaacctgcc 540  
 caacctcact ctacttcagg aaaagatgat gacaaaaatt taaagagtag tt 592

<210> 5382  
 <211> 346  
 <212> DNA  
 <213> Glycine max

<400> 5382

ttaccatttg aatttcggga gagatttcga agtttaaatt cgagcggatc gatataattat 60  
 aagcctgaat cggacattcg tgtgaaaaga tatgaccatt tgaatttctc aagagcttgc 120  
 gttgttcaat tccaacctct caacatatta tgcgctccaa accgaccttc ccggggaaag 180  
 gtattaacca tttgaattct cgagaagttg cgatggttta tttccaaccg gtccatatat 240  
 tataagcctg gaaccggcct tccgggggaa aggtcttacc cattggattt ctaaagaacc 300  
 ttcggtggtc aaatttgaac ctcttgacat tttatgcgcc ccaaac 346

<210> 5383  
 <211> 536  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5383

tatccttaaa caagtattag caacatcacc caatacttgt ttaatttttt tctcaccatg 60  
acattggtgg gagtatccac cgggtttgtt gatggcta at ctcaccgaa aaatttggtt 120  
ggatcatctat agtgggaattt tcccttccaa ccacgtttgt tccatccaca aagctaacac 180  
tcaagacctt gcttactctg accaacgaca tgtagtaat acttgtttaa tctagtatta 240  
tgtgtactta ccaaggacgt tgaaggttat ccttgaaagc atgctttttg caaacaatat 300  
aattcttgag taagagatta attctaaatt taagaattgg agttaaaaat tagaaccaga 360  
ggatctttat caagtagaag acacagtata tgctttgcag tttaagcaag aaacaagagg 420  
aaaatgcctt ggaggtaaaa attggagaag tcataccaca agtttctaag cttgactatt 480  
tgattccaaa atgatgggaa aattaatgat gttacacaca aaatantaag tgggtg 536

<210> 5384  
<211> 522  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5384

agcttgcttc tacaatctcc ccctttttga tgataacaac tctaaaatca agaaacacac 60  
acacacactt tttctagtc gatcactgc ataaatttcc attctcccct tttgtttttg 120  
agtttatgct tcatttgaaa ttaagttaat tacttatgtg agttcttgat ttattcccta 180  
tttctctccc cctttggcat caacaaaaag ccaaagtgcg taacaaatat aaaacataca 240  
taaatagacta atcatacaag agaatagaaa acaatcaaac aagataactt aaccattcat 300  
caatcttaga aagataatac ttcatagaat gtcataatat ccagaaagtc attcataata 360  
accaaataaa agtacatacc actgatcata tattatcaaa ataattaagt ttaaaattca 420  
taaccataaa caaccaagag caagtaaata taatcatcat gttcaggcat actanacaaa 480  
tattaaaaaa gaaataataa gtgctcaa at gtcatanaaa ca 522

<210> 5385  
<211> 504  
<212> DNA  
<213> Glycine max

<400> 5385

tgtaggaaat tcaaacgaca ataacttttt acttggatgt ccgattgaat cgggtaatat 60  
atcgagacgc taaaattga gactagaagc tcttagcaaa ttgaaatgac aataacttta 120  
tacacggatg tccggttgag tcccgttaata tatcgtgacg ctccaaattg aaaacggaaa 180  
ctcttagaaa attcaaacga caataacttt ttactcggat gcccgcacaga ttgtcgtaat 240  
ttatcgagag atgctccaaa ttgaaaatag aagctcgtat catattgaaa cgacaataac 300  
tttttactcg gatgtctgat tgagtcccg taaatatcga gacgctcaaa attttaatcc 360  
gaagctctga gaaaattgaa ttgacaatga ctttatacac ggatgtccgg ttgagccctt 420  
taatatatcg agacgctgca aattgaaaac agaagcttgg aggaaattca aacgacaata 480  
actttttact cggatgtccg attg 504

<210> 5386

<211> 544

<212> DNA

<213> Glycine max

<400> 5386

agcttgtacc aaattcaaac gacaataact tttttctcga atgtccgatt gtatcccata 60  
atatatagag acgctccaaa ttggaaacgg atgctcgtaa gaaattcaaa caacaacaac 120  
ttgttactcg aatgtccgat tgagtcccg taaatatcga ggcaactcaa attgaaaacg 180  
aaaactcgta gcaaattcaa atgacaataa ctttttactc ggatgttcga ttgagtgccg 240  
ttatatatcg acacactcaa aattgagatc agaagccttg agcattttca tatgacaata 300  
actttatagt cgcattgcct attgagtccc gtaatatatc gggatgcttg aaattgataa 360  
tggaagctcg tagcaaattc aaacgagaat aactttatac aaggatgacc gattgagtct 420  
cgtaatatat cgagacgcta caaatgaaa acggaagctc gtagcaaatt caaacgacaa 480  
taactttttt ctcggattcc cgattgagtc ccatattata tcgagatgct ccaaattgaa 540  
aacg 544

<210> 5387

<211> 530

<212> DNA

<213> Glycine max

<400> 5387

agcttgaaac ataacatcta ttgcaggtac caccgcttta gcaactttgt tttttatcgc 60  
tttctccatt ccatcctaaa ataaccaaaa agagaattca ccatgtaata agtattctga 120  
atcggttaata aagaaaatgg aaaacaagga caattgaaat aaaaaaatag tatgcaggat 180  
caaaccatga aagcatatgc agaaatggac ccctaaatat atatttttat caaaaagggt 240  
tttcttatta atagttgaca gttcttgcac atagcaaacc ctttaagaaaa ttaaaaatat 300  
atatatataa aatcaaaaaca cagtctaaca ctcatcttta ggacatgaat aactggacaa 360  
gtaacccatg gatgattgaa ccatccctct gttgtcttca agactaggac agcaaattatt 420  
tgcttttcta ggttctaggg tctataaata aaagaaaaaa acccgagata aatcattcat 480  
tcaatcataa gtgaaagaaa acatgaagaa tatatttcta aaaatactat 530

<210> 5388

<211> 489

<212> DNA

<213> Glycine max

<400> 5388

gaagcttgac aagcagttgg gccaaaagat ttctctcggg gtcctttctc tcaaacgagt 60  
ctgtgaccca gagagaaacc atggaaggat gaaagcctgg gtagttcaga tctttgatgc 120  
atagaacaac ttcattcaca tctctagcac tggattgaat agcaactgtc agaaaaatat 180  
gtaacaagac aaaataactt gaaaaaatat catcatcgta gcactacaaa aattagaaat 240  
caagtttctt tgtgactact taaaagcat agttactcaa cagggatcgc aatcgtgaat 300  
tgcccagcta attttttaat catgaaacat aatttgtatc gaattgtaag actcaaaaca 360  
attaaaaatt acttcaaata tatcatataa ttgatatgta gtgctcaatg taaaaattta 420  
aatagaaat aaataaaata acttaaccat aagttctata taaacaaatt attaggtata 480  
tctaaatct 489

<210> 5389

<211> 564

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5389

agcttcatcc gtgggtcaag aatcatagca attgaaagaa tgacattatg gtcactccaa 60  
tacttgccaa acttttccat catcaacact gccatatttt gcaatactgg atcatcacac 120  
ttaagtgttt ctogcaacaa ccattcaatt ttccatactt gcatgaagta ttcatggaa 180  
gttggataag atgtacctaa aaaaatttca aataagataa ttaactata aatataaatc 240  
tgaaactatt tattataatt atgaagtttg aaaaaatata actgaaatca aattagtcac 300  
cttataaaat ggcttaaaaa attcaccac tttttcagct cttttccatt cctcattaga 360  
tggaacacat ttgtattttc tatcacgaat aatgaaactt gcaaaagcac aacgatacct 420  
aagagcactc tcaagcatga tataagtaga attccaccga gtaggcacac ccaacctcaa 480  
gccactnta gtatcaatac ctcttacttg agcaatacan ttgataaata ctatntttct 540  
tgactcagag ctctcacata tttta 564

<210> 5390

<211> 562

<212> DNA

<213> Glycine max

<400> 5390

tcttgttgtt actatgaact ttcaatattt cttccctccc tctttcatct ggtaatccaa 60  
cagtgcacta ttggaacaat tacaaattgt catgtcttat aattttgttg aatttttagt 120  
aactactaac tagcttaaaa gtcataccta ccaactgatt gatcgatcgt gcaaaaagtt 180  
ttatactact agcatattat aataaaattc attgtcttat acgttaaaat ttgtttattt 240  
ttatagtaat tactttaaaa gctatattta taataaattc tgatgggtta atgatttaca 300  
atagcaatgc atggaaatta aactgataaa taataattat ataggcatta acaggggtta 360  
attataaagg attctaaagt tgcaagtaac atacctgtct atcaaacctc ccagggtctaa 420  
gcaatgctga atcaagaatt tcagggtctgt tggtagcagc aatgactata actccagtgt 480  
tttcagtga accatccatt tcaatgagca actggattag tgtttgctcc ctttcatcat 540  
tttctccacc tatacctgta cc 562

<210> 5391

<211> 484

<212> DNA

<213> Glycine max

<400> 5391

tctggaagga gatcaacttg atgttctatg cctcttgaag gtggcagtc atgaggaatc 60  
tccataggaa agacatTTTT aaatttctgc aataagggtt gaacactagg agaaatagaa 120  
atagtaaact cattagaatt atcagtagaa attttactgt ctttgcaata ctgtagattg 180  
agtgggttcat gagcaggtaa cactttcttc acttcactcg cctctgcaaa ataattaaat 240  
tttctctcat gtgtatcact ctctctctta tgtgtatcac tcttttcttc ggggtgatca 300  
ctcttctttt tcatattcet ttgtggggcc tcaactatTTT ctttctcttg ttctctcttt 360  
tctctcattc tgatttggtc atcacacact tctctaaggg atagaggttt aagagtaaac 420  
gaggaagatt tggctattcg tctgtaaggc ttttctttgt tacggttcaa caaatgttgc 480  
atTT 484

<210> 5392

<211> 437

<212> DNA

<213> Glycine max

<400> 5392

agcttgaaat tgatcaacag aagctctcga ggactttaaa tggtcataat ttgtaacacg 60  
gaagtccgat tcaggcgcat aatatgccga gacgctcgaa attgaacaac ggaatctctc 120  
gagaaactca aatggtcata acttatcaca cggagggtccg attccggcgg atagtatatc 180  
gagaagctcg gaattgaaca acgaaagctc tcgagaaatt caaatgggtca taacttttaa 240  
aacggaagta agattcaggt gcataatata tcaagaagct cgaaattgaa caacggaagc 300  
tgtcgatata ttcaaattgg cataacttat cacacgaaag atcgattcat gcgcatgata 360  
tatcgagacg ctcgaaattg aacaacggaa gctctcgaga aattcaaattg gtcataactt 420  
atcacacaag cgggctg 437

<210> 5393

<211> 473

<212> DNA

<213> Glycine max

<400> 5393

agcttcttca aaaatattgg gttatactca tgtgctccaa gatcttcaag actttgaatc 60  
 agttcaggaa tgtcatcata aagaaaatac tcatgaatta tagttacaga ttcctttttg 120  
 tacttcctca ccttctcatc ttcttggatt tccccatctt cagatgcagg tttggaaagt 180  
 gaagcatcaa gccatccttc agatattgcc ttggggacaa atgactgaaa caatgcctta 240  
 gctgatggaa tatcaagagc aagatcatct agggattctg ccaaacgaga aaaccctttc 300  
 accatttggc tggaactaac cagtccttct tctgctgctt cttttaatag cttcaacatt 360  
 ggaggttctg cggaacgtat ctccatggca agtatcacag ccctcttaac aacctcatga 420  
 tggaagaatg aaacccccaa ctccgtatac acctacaggc tttcaatgtg gca 473

<210> 5394  
 <211> 635  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5394

agcttaccag gctctcaa at tgctcaactt cgatgaagcc gcatatggag aaaggagaaa 60  
 attatagttg ctggaattaa aggaaatgag actgaatgcc tatgagtcct ctagaattta 120  
 caagcagaaa atgaaggcgt atcatgacaa gaaattgcat aaacagaact tccagccagg 180  
 ccaacaggac tctttaactc taggcttaga ttgttcctag gtaagttgaa atcgaagttg 240  
 ttaggaccgt ttgtcattaa agaagtgaga ccccatggag caattgagtt ggaggatcct 300  
 acaagaagca atcttgaaaa aaatggatac tcaatggaca acacttgaag atctacaatg 360  
 gcagacaatt agagaggctc acaagcattg tctatttaaa tgacccgtga agaaaacaca 420  
 acgtctagtt aaagacgata aactaagcgc tagttgggag gcaaccagc acatatgtac 480  
 aaaatccatc tttctggact ttttcaaaaa aaaaaaagcc caacaagtgt atacagtaga 540  
 aacaggggtg caagaaagca aaatcagatg ngctcacgaa gactcgtgct aagcacgcta 600  
 cttggcgcta agcgtgcagg atgtcacatg cgctt 635

<210> 5395  
 <211> 390  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations



<400> 5395

tgcagttagc tgtacttgtg aatttatgaa gatgacctct ttgttcacct tcccagaggg 60  
agtctctgat gccgacttag ttctcttggg gactacaaga cctacaactg gaaatacact 120  
tgcttgggct gtggcatgtg aacgggacca atggggccgt gctatagctg gtacattatc 180  
ctataattgt gttggtttaa atgggtgtct ttatcttgca tttgggatgc tttgtaactg 240  
aaagtgcctt tttgtttgtg tgcaggacat gttaatgttg ctctctgtca tttgacagct 300  
gaggcaaaga ctntgctttc agcgactctg atacatgagg tttgattatt tttttgtgtc 360  
tagaagagat tatatttgaa gcatggctga 390

<210> 5396

<211> 478

<212> DNA

<213> Glycine max

<400> 5396

tctaaacttt atacaagaat gaagctctga taccacttgt ttataagtga cctcagtatc 60  
ttaagaagag aggttgaatt aagataccaa actatcccca actaaaaatt atctctctct 120  
ttaactaata atgaaaccct aattatgaat tatttcaaga acaattcaaa ataaacttct 180  
ttaaagcgaa atataaactg caataaaata aaacaagttt aagggaagag agaattgtaaa 240  
ctcagatttt atactggttc gaccatgtcc tgtgccttcg tccagtcccc aagaaacctg 300  
cttgagattt ccactatctt gtaaaatcct ttacaaaat tctgaaccac acagggacaa 360  
ccattccctt gtgttcagat aaccttaca cttagagac cctcgggtctc ttaatcagat 420  
ttctttgaat aataagaaga agcattttct ctgtttacac aaagatgtac aatgaaag 478

<210> 5397

<211> 457

<212> DNA

<213> Glycine max

<400> 5397

tcagagactg cagcaggata tgagaagggt tagcaaacc cttgtgtaatc taaagcagaa 60  
tctgatcaaa gccagagaag atcttcaatt tgctcacgaa aaccttagaa acaataacat 120  
gaatggagat agaattgata gagtgaggca gctgacagaa gaggttatta atcttaatga 180

attggaggaa aagatgctta tgcagagagc aaaagtggat tggataagga aaggtgatgg 240  
gaataactcc tttttccatg atattataaa aagcagaaat aatagaagaa gtatatacat 300  
gctgtagaaa actgatggaa ccttgcttga aaaccagtct gagatagagg atgagatcat 360  
ggatttctac aagaaactca tggggactga tgatagccag ctgcaccata ttgacataga 420  
tgctatgaga aatggcaaac aagttaatat ggagcaa 457

<210> 5398  
<211> 431  
<212> DNA  
<213> Glycine max

<400> 5398

tatatatcaa agatatgaca acttataagt tgtagctac ttatacttag attttggtgg 60  
ttgcattgac tctcgggaagt ctcaacatct ggatacatct tcatgatggc taatggagca 120  
atatcttggga caagtgcaaa acaatcatta gtttctactt ctacatgaa ggttgagttt 180  
atttcataat ttgaagcaac atcatagggt atttgggttaa aaagtttcat ggccgatcta 240  
caagtgattg attacattcc tagactggta aaggtgtatt gtgataatcc agctgttggt 300  
tttctggcta aaagcaataa aagagaaagt caaacattga cattaagtgt ttagccatga 360  
gggaacatgt caaagtgaat gaaatcatta tttaacacat cactattgaa ctaatgattg 420  
tagaccatt g 431

<210> 5399  
<211> 665  
<212> DNA  
<213> Glycine max

<400> 5399

agcttgtcaa tcttttgagc aaggaccgcc cccaatgcat aattggatgc atcacacatc 60  
aactcaaagtg gggctgtcca gtcagatgcc tgaatgatag aggtggtagt caatgcatgc 120  
ttgtggcaat caaaagcctc tttgcaactgg tcatcaaaat caaactccac ctctttttgc 180  
agcagattgg atagtggaaag ggccactttg ctaaagtcct tgataaagcg cctataaaac 240  
cctgcatggc cgagaaaagga acgaacctct cacacacaag aggggtaagg caattgtgaa 300  
ataacagtta tctttgcagg gtctacctct atgcccttat tggaaattat atgccctaaa 360

actatacctt gttctacat taagtacat tttttaaat tcagcacaag gttagtttca 420  
 atgcgtctat taagaactct atccaaacta tccaaacatg catcaagaga ggatccataa 480  
 acagtaaaat catccataaa cacctcaatg caactctcta aaaagtcact gaaaatgcta 540  
 agcatacacc gctaaaaggc accaggggagc ttgcataagc caaagggcat ctttctataa 600  
 gaaaaagtgc aaaggacagg tgaatggggc tttttctgac cctaggagca tatgaattgt 660  
 aaata 665

<210> 5400  
 <211> 552  
 <212> DNA  
 <213> Glycine max

<400> 5400

agcttggatc aactcatatt actttttatt attttacttt ggtcaaaaaa ttagacaagc 60  
 gctaaatatt gaaatttctg atatttatga accacaagca gacattgtta cagcttcttt 120  
 gtcaacatgt aattggactt tgcaactatc caatcaatca tagttataaa ttagtaatca 180  
 tatcaciaat tatagatgaa aattacttat ccattcattt aaagattaac cattgggttaa 240  
 aagaaaaact tatacgatat caattaatta catatataat atctatatct agaactataa 300  
 tgatctaatt gtctaattga caagattaca aacgtctcgt ttaatatctt tccgtcaaga 360  
 ttaccttagc ttaggggtata tatatttcgc aacgacttcg ttgacattaa tgggtgaagta 420  
 gttggcgtgc atttgtcacg aagaagcaaa gaagaaccct tactcggggt cactaacaag 480  
 gcgtgcgtgc tcgttatgct acttgtctac acttcaaaat taaaataaaa taaataccag 540  
 ggctttaaaa ca 552

<210> 5401  
 <211> 190  
 <212> DNA  
 <213> Glycine max

<400> 5401

tgctacaatt aacacctgaa gctctcagat actaccctgg atgtaggaat taccacacac 60  
 tcacatgggtg gaaccctcat ctataaaaac agtagcctgc tacttactta caaaatgctg 120  
 aaagcccaat cggaccatac attcctacag cggccaact tcggcaacga ccacagaaac 180

atgctacaga

190

<210> 5402  
<211> 579  
<212> DNA  
<213> Glycine max

<400> 5402

agcttgaatc ggacctcagt gtgaaaagtt atgaccattt gaatttctcg agagctttcg 60  
ttgttcaatg tcgagcatct cgacatatta tgcgctcgaa tcgaacatcc gtgtgaaaag 120  
ttatgaccat ttgagtttct cgagagcttc cgtggttcaa ttccgagtat ctagacctat 180  
tatgtgcccg aatctgacct tcgtgtgaaa agttatgacc atttgaattt ctcgagagct 240  
tccgatgttt aatttcgagc gtctcaatat attgtgagcc tgaatcggag ctcaagtgtga 300  
aaagttatga ccatttgtat ttctcgaaag cttccttggc tcaattccga gcgtctcgac 360  
atattatgtg cccgaatctg accttcgtgt gaaaagttat gaccatttga atttctcgag 420  
agcttccgat gttcaatttc gagcgtctca atatattgtg cccctgaatc ggacctcact 480  
gtgaaaagta tgaccattgg aatttctcga gagctttctt ggttaaattc gagcgtctcg 540  
attattatgg gcctgatcgg accttcgggg aaaagttat 579

<210> 5403  
<211> 520  
<212> DNA  
<213> Glycine max

<400> 5403

tatgctgcaa atatttaca tagacctgct caacctcagc atttaaata accacagcag 60  
agcaattatg acctttccag caacagatac aacctggat ggaggaaatca ccctaccctc 120  
agatggtcca gccctcagca acaacaacag cagcctgctc cttccttcca aaatgctgct 180  
ggccaagca gaccatacat tctccacca atccaacaac agcaacaacc ccagaaacag 240  
ccaacagttg aggccctcc acaaccttcc ctgaagaac ttgtgaggca aatgactatg 300  
cagaacatgc agtttcagca agagactaga gcctccattc agagcttaac caatcagatg 360  
ggacaattag ctactcaatt gaatcaacaa caggcccaga attctgacaa gctgccctct 420  
caagctgtcc aaaaccccaa aaatgccagt gccatttcat tgaggtcggg atagcagtgt 480

caaggacctc aaccgtagc acctttctta tctgcaaag

520

<210> 5404  
<211> 625  
<212> DNA  
<213> Glycine max

<400> 5404

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cactggtaat cgattaccaa aacattgtaa tgcattacag ccttttgaaa atatttgaa 120  
cgttgtaaat tcagtttgaa aactttttca aactcatttt actactggta atcgattaca 180  
acaatatgat aatcgattac cagagagtaa aaactctttg gtaaagggtt tgtcaaaaac 240  
tcatgtgcta ttcaaatttt tgaaaaactt ttaataactt atcttgattg agtcctttct 300  
ttattcttga atcttgagtc ttgaatcttg atcttgatta ttgagatctt taatcttgaa 360  
tcttgattct tgattgtagg ctttcttctt gagtcttgaa ttcttcttga ttcttgaact 420  
cttgacttgt tcttgattca cttgagttgt tctttgatct tttgagcttt ttggatcatca 480  
cctttgtcat catcttttgt gtcattcattg ttatcatcaa aacacctttg aatcattggt 540  
gattcatcat gaatctttgc tttcacaata ttgcctaccc tgaataccct aacctaacct 600  
gtacctgta tgcattgtgac ctact 625

<210> 5405  
<211> 353  
<212> DNA  
<213> Glycine max

<400> 5405

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gatcattaga actaacaat ttagtaataa ctttggttga tcaagtggcc tatgaataat 120  
taagaagggg ggttgaatta attattgcta aacctttact aattaaaaat ttctcttctg 180  
agacttttac taaattgtta agagaatgag gagtgaagaa taaacttaac agatagtcaa 240  
agcgaaaatt aaatgcacag cggaaagtta aagagtatgg aagaaggaga caaacacaca 300  
agagttttta tactggttcg acaacaaccc gtgcctacat gcagtcccca agc 353

<210> 5406

<211> 509  
 <212> DNA  
 <213> Glycine max

<400> 5406

tctaaacttt atacaagaat gaagctctga taccacttgt tttaaagtgg cctcaaagt 60  
 cttaagaagg ggggggttgaa ttaagatatt ataaactatt tccccaatta aaattttatt 120  
 tcactttcta ttcaagttac aaattccctt aacaatgaac ttcttaaata ttgattcaaa 180  
 tagaacaatc tgaatatgaa tataaaacaa taataaataa atgagtttaa gggaagagaa 240  
 agtacaaaact tggatttata ctgggttcggc cacacccttg tgcctacgtc cagctcccaa 300  
 gcaacccgct tgagagttcc actatcttgt aaaatccttt tacaagttct gaacacacaa 360  
 ggacaatcct tccttttgtgt tcagaattct ttacaacaa gagaccgtcg gtctcttaat 420  
 cccttagaga atttgaaaga agagaagaat gaatctctct tgaaagagat agattttaca 480  
 atctgagcac tctaattgatt ccttaatga 509

<210> 5407  
 <211> 553  
 <212> DNA  
 <213> Glycine max

<400> 5407

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 attttattgc ccactgtg gtccactaag gagctaccta atggataata aacttatagc 180  
 gcttactgct aactatgctc cttggaaaac cgtggagcct cacgctttac ttgaaaaaca 240  
 aatgcgaccc ctgtgaagca tcatcaactt ttttacatgg aataaaatga gccattttat 300  
 aaaacctatc tgcaaccaca aaagtggaat ctctaccatt gcttgttttt ggcagcccca 360  
 aaacaaaatc catggattaa tcaatgcaag gatactccgg aattggcaat ggagtataca 420  
 atgcatgagg ctttacctta tactttgtct tttacatac aatgcaatgt tcacaaaatt 480  
 tctgcgcac ctttttcata tgaagccaat aaaaatgctc ttgtaatgtt tctagagtct 540  
 tttggacccc aaa 553

<210> 5408

<211> 593  
 <212> DNA  
 <213> Glycine max

<400> 5408

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 ctacaaagac tactcagaat gccccgaaat acaaggctaa aaccctatac tactggaatg 120  
 accaaaatac aaggcccaga cgaaggaaat acctattcta atatttaca agataagcgg 180  
 gctcatactt agcccatggg ctcgaaatct accctaaggc tcatgagaac cctagggcct 240  
 tcccttggat ctctagccca atctacttgg tgtcttctac ccaatgccct tgcggggtag 300  
 gattgcatca cttcatatta ttctccatgt atatcctcca ttttcttgtg gtttggtgct 360  
 gtttagagta gattcaaaaa aataaaccga ttaaatctta gatctacact tgttcttgca 420  
 tttctatggt tcaaattttg tagatctact cttgaatcat gtttttgtgt tgagtttacg 480  
 ttctatcatt ttctattcat aatattcttg tgctgaacct tagatctaatt ttttctttca 540  
 aatattgatt agaaaaaaaa acacaaaatc taagtgtaat cacttaatcc atg 593

<210> 5409  
 <211> 580  
 <212> DNA  
 <213> Glycine max

<400> 5409

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 taattgaaaa gcctgttatt attattatta ttattaccac ttgtttgtct tttcacaggt 120  
 ctgtgatttt ggtctgtcac gaatgaagca ccatacatat ttgtcatcca aatcctgtgc 180  
 tggaacggta acttttcaga acttgatgat aagcttttgg aaattctgtt tttactcctt 240  
 attcaccatt gatataaatt atcaccatag ttggtttcat tgtaggatct acaattttta 300  
 caataaaaaa aactaaatat atcttttggc tgcagccgga gtggatggcg ccagaagtct 360  
 tgagaaatga accagccaat gagaaagaag ttaattctgc gtctgtgtca gttcatgga 420  
 aatatgattt tgaagtctgc aatgtgatag ttaaagtttg catgcacgtg tgatgtgtat 480  
 tagtttggtg tgatcttgtg ggagttaact accacaagaa ttccctggca agggtttgaa 540  
 cccatgcagg ttgttgagc tgttgattt aaaataaacg 580

<210> 5410  
 <211> 485  
 <212> DNA  
 <213> Glycine max

<400> 5410

ttgagtga aa cttgggtggt ttgtcaagaac aggacgtatt ctctgtgaga caaaccaata 60  
 taaatttctt gtgtctcatt cttattattt tctcttctac tatttaaact aacccatggt 120  
 ttgaatttga tcttttgtgt ttgaaaaatt cggtttggtt tacaaagatt tgaaactatc 180  
 gtctgatttg ctttgcaaaa gtctgatatt tgttttctta aggcttgctc atctgatgat 240  
 aactttgtta tttacgaaaa gaatttaa at tttctcaaaa tcccaacctt tttatgatat 300  
 ttgtctctac acatgtttta ctctattttg acctgtcatg ggccta acat gtttctacct 360  
 ccctaaatgc gtatttcata ataaaaaat tatatagggc tatttccata tttaaactt 420  
 tgagttatat ttatat taa ataagaatcc atactttttg tccttttaaa tatacctttt 480  
 tttgt 485

<210> 5411  
 <211> 548  
 <212> DNA  
 <213> Glycine max

<400> 5411

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 ggctcatggg ccactttggg atagaccaga cccttgctctt actcaaagaa aagttttatt 120  
 ggccccatat gaagaaagat gtccataagc attgcactag gtgtgtggct tgtttacaag 180  
 ccaagtctag ggtgatgcct catgggctat acacaccctt acctatccca tctgcacctt 240  
 gggtagacat tagtatggac tttgtccttg ggcttcctag aacccaaaga ggtgtagact 300  
 ctatctttgt ggtggtggat aggttttagca agatggcaca ctttatacca tgccacaagg 360  
 tggatgatgc ttaccacatc tcaaaactct ttttcaggga agttgtgaga ctccatggtt 420  
 tgcctaggac cattgtgtca gatagagatg ctaagttcct taaccacttc tggaaaacct 480  
 tatgggctaa gttaggaact aaactttttt ctctaccact tgatcatccac aaactgatgg 540  
 gcaaacag 548



<210> 5412  
 <211> 565  
 <212> DNA  
 <213> Glycine max

<400> 5412

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 tgatgtcggt cagtatctca aaaaagccta cgatgatttg gaagaaccct tgacctgttt 120  
 tctcaaactc tccaaagttg attggcattt ctatgacca tatatgttac agttaccaa 180  
 aaggttcaaa gagaaaacca aatggtgtgg aatagtaagc cccggttggg caccatagtt 240  
 gaaggtattg agccacaagg cagttggtgg ggttttgact cactctggtt ggacctctgt 300  
 ggtggaggtt gtttagaatg aaaaacctct agttttgtta atgtttcttg cagaccacgg 360  
 attgaactcg aggggtgttg aagtgaagaa tatggggtat tcaattccta aggatgaaca 420  
 agatggatca ttcacgagtg atgcggtcgc taacttaata aggttggtta tggttgtgga 480  
 aaaaggaagg atttacagag aaaaggttta aaaggtgaag gatttatgtc tgaatattgt 540  
 tagacaagaa aaatatatta acaaa 565

<210> 5413  
 <211> 691  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5413

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 aaaaacgaga gtgtgtaatg attttttttt ttgtcttgta tgaacatcct ttagtaaaat 120  
 gaacatttct ctctatatga ttaactttgg attttgagtc ataccttatc caaaactaga 180  
 catacatgac tttttatata ggtaaagttt ataaaatttt gttatctaata agtataagt 240  
 tatgcaatag ttttataaat actctataaa aggaaaaaaa atgaaaactt gagtattaat 300  
 ataaatttat aatccgataa atatatttat gtataaattt ggtttgggtt ggattagatt 360  
 gaatttttaa atcaaatcca aaatctgatt ttatccaaaa caaatgggtt tattaaattt 420  
 taatttggtc gactattggt ttatttgatt ttcagttntt tgcttgattt attcataaag 480  
 ttatttgata aaattagttt atgaacattc ctaagaaaac cgataaagta aagacatcan 540

atgtacaatt aagtctatta actagtaaag tacgcctttg ttgacanatc tacagtgtta 600  
 aacattcgta gattaatatg tatagnacat tctttgccta ttgattctta atggacatct 660  
 ctcgactactaa ttttttcagt ttaaggaaaa g 691

<210> 5414  
 <211> 562  
 <212> DNA  
 <213> Glycine max

<400> 5414

agcttcattg gaaagaaact aactttttgg ttttatttaa aaaatttgat aattatatca 60  
 attataatta tttttctgtc attaattgta tttattaatg gataaatattg tttattaaac 120  
 ttgttatatt acaacatatt taatttggtt ttatttttaa cattgattat tgtatgttat 180  
 gagtattgag taatgagtaa tggcatttat aagtgaatt taaattttta tattatcaga 240  
 tcatgaatat taagagggcg tgccctggtg caacagtaaa gttgcccttt gtgaccagtt 300  
 gatttcaggt tctggaaata gccataaata ctatgttttg ttttgcttaa tatcgcttga 360  
 catattatat taaaaattaa aataaaatgt gttaactatt acaggttcct tggttatatc 420  
 attaaacctt aaagttgcct tcaccagttt aataaccagt cctattttta aaccttgac 480  
 ttgcttataa tataagggac tgaagtaaga tgctgcttgc catttagtag ataatattta 540  
 tgactgaaaa ccctaacacg tt 562

<210> 5415  
 <211> 602  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5415

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 cacacacatt ttttctagt cgatcactca cataaatttc cattctcccc ctttgttttt 120  
 gaatttatgc ttcacttaaa attaagttaa ttactcatct gagttcttga tttaatccct 180  
 atttctctcc ccctttggca tcaacaaaaa gccaaagtgc ataacaagta tgaaacatac 240  
 aaatacaact aatcattcac acatcaatca tggaaaaata taaactaatc atgaagcaag 300

aaacatgact agatcaaata tatagaaaaa tcacatagtc atataacata attcataatt 360  
gttcaaacia accatgcaaa taaagaaata ctaaattggt caaatgtcat aataatatag 420  
ccaaatacac ggctggaaat caaagtacta gtaatattaa aataagagaa aaactaaaat 480  
aatgggtggcg acgggtgggtg tagatcaaag cttgaacgaa tataagagac atcttcttcg 540  
actntgggtga ttcttgactc catctcattg aagcgcattg ccacttgtaa ctccaaagta 600  
tg 602

<210> 5416  
<211> 540  
<212> DNA  
<213> Glycine max

<400> 5416

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ctatacgaga catcttgcca aacaaagtca gggtcacgat aactcgcttg tgctttttct 120  
tccatgctat atgtagcaaa gtgatttatt cagtaattgt tgatgagttg gaaaatgagg 180  
ccgcaattat actgtgccag ttggagatgt attttcccc tgctttcttt gacatcatga 240  
ttcacttgat tgtgcatctg gtcagagaaa tcaaatgttg tggctctgtt tatctacggt 300  
ggatgtgccc gggtgagcga tacatgaaga tcttaaaagg gtatacaaaa aatctatatc 360  
gtccggaagc atctattggt gagaggtaca ttgcagaaga agccattgaa ttttggttag 420  
aataacttaga aaaggctaaa gctgttgggc ttcctgagtg tcagcatgat gacaaagtgg 480  
gggtaagggg tcaagaggac tgcacgtgat cacttcaagt gtagaagatt tgttacaagc 540

<210> 5417  
<211> 524  
<212> DNA  
<213> Glycine max

<400> 5417

aactctgctt tccaccaatc ttcgatctct ttcaggatca gaataggggt gtttatgacc 60  
gggaatcgat tgggtgatttg gatccctacg agtatcaact ggtgctacaa tgtgacatac 120  
cagactcttt aaatatgtct aagcgcatac ttccttagtc taaaactgac taaagaaatg 180  
tacttttagt tgagcaatgt atccttggtc atttcttatg aagactatat catctatata 240

gaccaccgag taagaacatc tactctatga cgtatgacaa taaaaaactg aatggactgc 300  
 ttcacttcgg tatatcccaa aagcctgaac agctgagctg aattttccac accaagcacg 360  
 tggggattgt ttgagtccat aaagagacct ccaaaatctg caaaccaagc tataactcccc 420  
 ctgagcaaca aatccccggg ttgctacata taaatcggct attctaaatt cacatgtaga 480  
 aatgcatttt taatatccaa ctgatacagc ggctaaagac agat 524

<210> 5418  
 <211> 521  
 <212> DNA  
 <213> Glycine max

<400> 5418

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 gatcacatga tctgaccta ttatgtaaca atagaatatt attgttattt tatggacaac 180  
 ttgacattt ataaaataat actcccttgg cagtattaat tatattcttg gtgctagcga 240  
 aaaatataat aatattccac tagaatattt atgtggttag atgaaattct gtaatttaat 300  
 tatcaaataa attattttgt ttgcaaaga ttataacact catttgtatg tgacctcata 360  
 tgttcaatac tacacggata atagtacatt aatcatcatt aatttactag tcaagggtgag 420  
 catctaacia cactccttaa cgtcgggatg gtatgaagta acatcttgta cttttcaaga 480  
 accaatgaaa gaataatata acgttttctt ccatcattta t 521

<210> 5419  
 <211> 570  
 <212> DNA  
 <213> Glycine max

<400> 5419

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 cccatgattg ggtagcaatt ttgatttgg atccatagga gtatcaattg gtctacaatc 120  
 tgacatacca gtttctttta gtatgtctaa cgcatacttc cttagtctaa aatgactaa 180  
 ataaatgttc ttatagttga gcaatttttc cttgggtcatt tcttatgatg actatatcat 240  
 ctatatagac caccaagtaa aaacatctac tcgatgaggt atgacaataa aaaactgaat 300

ggctctgcttc acttcggtttt atccccaaaag cctgaacaac tgagctgaat tttccaaacc 360  
aagcacgtgg ggattgtttg agtccataaa gagacctcca aaatttgcaa accaagctag 420  
actccccctg agcaacaaat cccgggtggtt gctccatata aatctcctat tctaattccc 480  
catgtacaga tgcattttta atatccaact gatacagtgg ctaatgacag atggcagcta 540  
tggcaagaaa gagtcaaaca aaagtaattt 570

<210> 5420  
<211> 548  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5420

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atctacgatac aaactttatg gtttagcataa actggaacgc tgaacaacag taggtgttgg 180  
ctttgggttc atgctttctg atagaacaag tactttgaag acatgtttta ataataattt 240  
tcataatttt gaaactgttt tatttaagct tcagcagttg ttgcttgcta gtactcatgc 300  
tatgttggtt actctctagt ctacttacta ctaatgttgg agctttttcc catctatgct 360  
ctctatatcc agtatttgaa gntaagagct ctttaaaggc aatcctatac acattacttc 420  
tatgaagcaa ctgtcggagc tggcttttca attggttagca ctctacgtgg cctccttgaa 480  
actggagaca aaatattaca aatcgaaggc atctttaggg ttgctttgat ggggtatata 540  
tctttttt 548

<210> 5421  
<211> 619  
<212> DNA  
<213> Glycine max

<400> 5421

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gtttgattct accaagagaa ataataagg atgtgcttaa aagaccacg tcaggaatgc 120  
tggacctctt tctacacacc aatctccctg tggcctcact gtaatgggtt agcacagaaa 180  
atatactgtc catggcagta acagcacttc gcttctcact atcactcgcc tcacacggct 240

cttctctctc cacttctgca tcccacaaag ctaaaaaatc agtagaaccc aaacactagg 300  
acaattactg ggagaccaa aggaactatt acaattctgc atcaaatatc aagtttaaaa 360  
tacattttta ctttttttct ttatttagca taacctaa tgatcaaaaa gcacatgtat 420  
ctacgttttg tcctaaaatt atttttaatt atgcgactaa ttttaattatt atggttggtg 480  
aagcaacgct tgagtacgaa gcactcactt gacatgcatg aataaggaaa gaaaagggaag 540  
aaaaaaaaa ctaaaccaag aaataaacct ctgacatcag gttcgagcac ttgtccaat 600  
gaacaaacgc gatcaatct 619

<210> 5422  
<211> 598  
<212> DNA  
<213> Glycine max

<400> 5422

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aacaaaatgg gcttttcaaa taaaaatccg acccacttta agtgactcag tacaaaaaca 120  
ttgcatttca ttaagcttgc gtttagtgat cacaatccat atgttggatg catgtgtata 180  
gtgcacaaga cttactaagc tcattggacg atagggcctt tggatgcata tcaatgtggt 240  
gagaccttcc acataaattt gaaacttcat tccacaagaa gcatgccaa gaaactctta 300  
gcgagattaa cctatcctca gtaaagggtt ttgtaaataa ataaacaagt tgatctcctg 360  
tagatacaaa atgtaattcc atagtaccct tctaagtgtg atcccttatg aaatgggtgtt 420  
ttatttctat atgtttggct catgaatgca tgataggatt tttagaaaga tcaatagcaa 480  
caatattatc acaaaggata gtaatgttac tctcaaatag gttatagtcg gcaagctgat 540  
gttaatccac aggagttgaa aacaaagaca tgcagggtgat atatactcta tttatgct 598

<210> 5423  
<211> 514  
<212> DNA  
<213> Glycine max

<400> 5423

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aaatcttcat gatatacatt ttctgtatac acacgcatta aaaactcttt ctctttgtat 120

caacacggtt tatataaaaa ctctattcct gttcaaagat ttcttttccg tttttcaaca 180  
aacactcgtg gtttatacaa aaatttattt atatacactc attactcaca cacaagaatt 240  
tctttttaca cattattttc acacacaaaa tgtctccata cactttttac atataaaaac 300  
tcttttcttt tctttatata tagacatgac atttggtcac aacgcctctt tcttttttct 360  
attcttagcg ttatcatgat tattttgttg ggtttatttt tacgacgacg ttcctaaagg 420  
agaactctac aagggttcgg aattctcaca aacattatct acgataacta acacaacagt 480  
ccacacaaaa tgtatgctca aaacaaaata tgat 514

<210> 5424  
<211> 609  
<212> DNA  
<213> Glycine max

<400> 5424

gcatgcaagc ttcgaacgat catcgcttca ttcttgtttc gatagattat ttcaccaaatt 60  
gggtagaagc ggcttcttat accaatgtca tgaagagtgt ggtggtcaga ttcataaaga 120  
aggaacttat ttgttgatac ggactcccta ggaagatcat tactgacaat ggcaccaatc 180  
ttaataacaa aatgatgcaa gaaatgtgcg gggatttcaa gatccagcat cataactcca 240  
ccccctatcg gccaaagatg aatgggggttg tggaggctgc aaataaaaaat atttagaaga 300  
ttattcagaa gatgacagtg tcatacaaag attggcatga gatgttcctt tttgccctgc 360  
atggatatca aacctcggtg cgaacttcta ctggggcaac gccgtattcc ttggtttatg 420  
ggatggaagc ggcgctccca tttgaggtag aggtcccttc ccagaagata ctagcggaat 480  
tgggcctaaa agaatcagag tgggctcaaa catgctacga ccaactcaac cttattgaaa 540  
ggaagcgttt gacagccgtg agccatgggc gccagtatta acaaaggata aagaacgcgt 600  
tcgacaaga 609

<210> 5425  
<211> 508  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5425

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 atatatcgag acgctcgaaa tggaataaccg aagctcagag caaatTTaaa cgacaataac 120  
 ctttttactc ggatgtctga ttgagtcccg taatatatcg agatgctcga aattgaatgt 180  
 tgaagctctg atcaaattga aacgacaata aatttttact cggatgactg attgagtccc 240  
 gtaatatatc gaaacgctcg aaattgaatg ccgaagctct gagcaaattc aaacgacaat 300  
 aactttttac tcggatgtct gattgagtcc cgtaatatat cgagacgctc gaaatggaat 360  
 accgaagcgc tgagcaaatt canacgacaa taacttatta ctcggatgtc tgattgagtc 420  
 cccgaatata tcgaaaagct cgaaattgaa tgttgaagct ctgagcaaatt tcaaacgaca 480  
 aaaactcttt acttgatgt ctgattga 508

<210> 5426  
 <211> 510  
 <212> DNA  
 <213> Glycine max

<400> 5426

agctttcagc tgtctacttg gatgattctg atccatctag catgtttgat gatgtgctgc 60  
 tgtgtaagga tggtaagagt ccatctatTT tttatgctgg ccgtgaaccg tcaccatcgc 120  
 agattgctga ctcaggagga tctaattggga agaaaacacg atcgaagaaa ggttccaaca 180  
 agaggacaag tgcaagcgca acggtggatt tatggacttt gctaactcaa tgtgcacagg 240  
 ctgtggctag ctttgaccaa aggactgcaa atgaaacact caagcagatt aggcagcact 300  
 cttcacctta tggcgatgga cttcagcgtt tggctcatta ctttgccgat ggccttgaga 360  
 aacggttagc tgctgggaca ccaaagttca tttcctttca atcagcatct gccgcagata 420  
 tgttgaaagc ctacagagtg tataatctcag catcaccatt tctcaagatg tcaaatttct 480  
 tggctaacag cactattctg aagctagcac 510

<210> 5427  
 <211> 376  
 <212> DNA  
 <213> Glycine max

<400> 5427

ttatatatcg agccgatgta taataattac ttatcaactt atttctctca ttagtgacga 60



gcacagagta tattaanaag aatgtgttaa acatgggtatt ttcaggtgac tattaagtat 120  
atggatttga cttgggatgc gtgaacaagc tctcattcaa tggcgaaaaa gctcgtgaac 180  
gagtcacctt cccctgtcca cctctggcac tccaaccact gagtgctgta ttggacctgt 240  
aaaatgcccc ctcaatcatg ctggccttgc ctaaaatgat agccccagct tctcttaatc 300  
tggaactac acctgcatct ctaggcacca cagagcccag aagagcaaaa gagcctgcag 360  
tggtgttcat cttatc 376

<210> 5428  
<211> 561  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5428

agcttttaac tgaatttgca gcgttccaat tgatttttaa atggtgtaat cgattacaac 60  
atattggtaa tcggttacca gtgtatctaa acgttgaaat tcaaattcaa ttgtgaagag 120  
tcatatcttt tcagaaatgt tttgtgtaat cgattacatg gttatggtaa tcgattacca 180  
gtgacaagtt ttgaatgaaa agtcaagaga tgtaactctt ccaatgggtt tcagggtttt 240  
ctcaacgtta taactcttcc aatgggtttt ttgactggac atgaagagtc tataaaagca 300  
agaccttgac ttgcatttca ataacttttt ataacaactt tttagaattt cttgaacaac 360  
ttttgagaaa tcttgaaacc cttactactt atncttcttc ttcttccttt gccaaaagct 420  
ttctaagttt tctggtttcc aaaccttggt ctttcacaga aaacaaaagn gngctatatc 480  
tttttattct ctctccctt gccaaaagag ttcaacaagg actaatcacc tgaatctttt 540  
tttggtcttc ttctcttttt c 561

<210> 5429  
<211> 440  
<212> DNA  
<213> Glycine max

<400> 5429

tgaaattgaa caacggaagc tctcgagaaa ttcaaagct catttcattt cacacggatg 60  
tccgattcag atgcataacg tatctagatg ctcaaaattg aaaaacagaa gctctcgaga 120  
aattcaaag gtcataaact ttaacatgga tgtctgattc cgaagcataa catatcgtga 180

cgctcaaaat tgaataagag aagctctcga gaaattcaaa ttgtcataaa ttttcacacg 240  
 gatgttcgat tcggggataa aatatgttga gatgcttgaa attgagagat aaaagctctt 300  
 gtgaaattcc aatggtcata acttttctact cggatttccg attcaagaca tttgaaattg 360  
 accaacctga gctcttttaa aattccaact ggtcgttaact tttcacacgg atgtccgaat 420  
 ccgggaaata ttatatcgag 440

<210> 5430  
 <211> 487  
 <212> DNA  
 <213> Glycine max

<400> 5430

tcttagtctc acctgatgaa gatgaattcg tggctacttc attctctcct ctaatgacaa 60  
 tagcatcatt tctggcattg aattgctggg agttggaagc catcttctca attaaatttc 120  
 tggcttcagc aggggtcatg tctccaaggg ctccaccact ggcagcatct atcatacttc 180  
 tctccatgtt actaagtcct tcataaaaat attgggggag aagctgctca taaatctggt 240  
 ggtgagagca actggcacat agtttcttga atctctccca gtattcatat aattaagctc 300  
 tctccactga gttgcctaata tcctgaaata tcttttctga tggtcgtggt cctggaagca 360  
 gggaaatttt tttctaagaa tactctcttg aggtcatccc aactcgtgat ggaccgtgga 420  
 gcaaggtaat atagccagtc ctttgccact ccctctaaag aatgatgaaa ggcgttcaga 480  
 aatatgt 487

<210> 5431  
 <211> 598  
 <212> DNA  
 <213> Glycine max

<400> 5431

agctttgagc aaattcaaac gacaataaat ttttactcgg atgtccgatt gagtctcgta 60  
 atatatcgag aagctcgaaa tggaatacca aagctctgag caaattcaaa cgacaataac 120  
 tttttactcg gatgtcttat tgagtcccat aatttatcgg aacgctcgaa atagaatacc 180  
 gaagctttga gcaaattcaa acgacaataa cctttttact cggaagtcgg attgagtccc 240  
 gttatatatc cagacgctcg aaattgaatg ttgaagctct gagcaaattc aaacgacaat 300

aaccttttta ctcagatgtc ggatagagtc ccgtaatata ttgagacgct cgaaatggaa 360  
taccgaagct ctgagcaaat tcaaacgaca ataacttttt actcggatgt gcgattgagt 420  
cccgtaatat atcgaaacgc tcgaaattga atgttgaagc tctgagcaaa ttcaaacgac 480  
aataaatttt tactcggatg tccgattgag tcccgtata tatcgagacg ctcgaaatgg 540  
ataaccaaag ctctgagcaa atacaaacga caataacttt ttacttggat gtcttatt 598

<210> 5432  
<211> 625  
<212> DNA  
<213> Glycine max

<400> 5432

ttgagccaac tcaaacgata ataacttttt actcggatgt ttgattgagt cccgtaacat 60  
atcgagacgc tcgaaattga atgttgaacc tctgagccaa ttcaaacgac aataactttt 120  
ttcacggatg tctgattgag tcccgtata tattgagacg ctcgaaattg aatgttgaac 180  
ctctgagcaa attcaaatga caataacttt ttactcggat gtctgattga gtcccgtaac 240  
atatcgagac gctcgaaatt gaatgttgaa gctctgagcc aatacaaacg accataactt 300  
tttactcgga tgtctgattg agtcccgtaa catatcgaga cgctcgaaat tgaatgttga 360  
agctctgagc caatacaaac gaccataact ttttactcgg atgtctgatt gaggcccgt 420  
acatatcgag acgctcgaaa ttgaatgttg aagctctgag ccaatacaaa cgaccataac 480  
ttttttctcg gatgtctgat tgagtcccg aacatatcga gacgctcgaa attgaatgtt 540  
gagctctgag ccaactcaaa cgacaaataa cttttactcg gatgtctgat tgagtcccg 600  
aacatatcga gacgctcgaa attga 625

<210> 5433  
<211> 557  
<212> DNA  
<213> Glycine max

<400> 5433

agcttcaaca ttcaatttcg accgtcttga tatgttaagg gactcaatca gacatccgag 60  
aaaaaagtta ttgtcgtttg agttggctca gagcttcaac attcaatttc gaccgtctcg 120  
atatgttaag ggactcaatc agacatccga gtaaaaagtt atggtccttt gtattggctc 180

agagcttcaa cattcaatth cgagcgtctc gatatgttac gggactcaat cagatatccg 240  
 agaaaaaagt tatcgctcgtt tgagttggct cagagcttca acattcaatt tcgagcgtct 300  
 cgatatgtta cgggactcaa tcagacatcc gagtaaaaag ttatggctct ttgtattggc 360  
 tcagagcttc aacattcaat ttcgagcgtc tcgatatgtt acgggactca atcagatatc 420  
 cgagaaaaaa gttatcgctc tttgagttgg ctcagagatt caacattcaa tttcgagcgt 480  
 ctcgatatat tacgggactc aatcagacat ccgagtaaaa agttattgtc gtttgatttg 540  
 ctcagagctc aacattc 557

<210> 5434  
 <211> 645  
 <212> DNA  
 <213> Glycine max

<400> 5434

ttggctgcgc agcagctctg atttcgcgag tatttatagt ttatgacgca ttgtaatcga 60  
 ttacaggtat gggtaatcga ttacatgcc aataagcctt ctggtaatcg attacaggat 120  
 gttgtaatcg attacaggct gcctgttcat gtgtaatcga ttacactgga tggtaatcga 180  
 ttaccagagc ctatcctagg ctagtttcta agagaatatc tatatttatg ctcaaataca 240  
 tectatatga ctaattttca ctactaatac actaaattca atcattcaat tactatgtac 300  
 acaagaaatt ataaattcta tcataaaaaac aagaattcaa acaagatcaa acaaaacaat 360  
 ctacaatcaa aagataaaaa gttaatcaac ctatcaatca accaatcaat caaccaatca 420  
 attcctattt gtctaaatct cttacatcta aaagacctaa ttctcttcta atagagaaaa 480  
 acactttctt ggggagaggt ttagtgaaaa tatcagcaag ttgattctta gtatcaacaa 540  
 attctaatac acaatctccc ttttaagacat gatctctaaa aaagggtgtc taatctctaa 600  
 tatgttagtt cttgaatggt gaactgggtg tttggataga attat 645

<210> 5435  
 <211> 561  
 <212> DNA  
 <213> Glycine max

<400> 5435

agcttgtagc aaattcgaac ggcaataaca ttttactcgg aagtccgatt gagtcccgtg 60

atatatcgaa acgctcaaaa tttaaaatcg aaggctcgag caaatTTTtaa cgacaataac 120  
 atttcactcg gaactccgat tgagtcccg aatatatcga gacgctcgaa atttaaaacc 180  
 gaagctcgca gcaaatgcta acgacaataa catttcactc ggaagtccga ttgagtcccg 240  
 taatatatcg agacgctcaa aatttaaaac cgaagctcgc agcaaatgct aacgacaata 300  
 acatttcact cggaagtTCg attgagtccc gtaatatatc gagacgctcg aaattTaaaa 360  
 ccgaagctcg cagcaaatgc taacgacaat aacatttcac tcggaagtcc gattgagtcc 420  
 cgtaatatat cgagacgctc aaaattTaaa accgaagctc gcagcaaatt ctaacgacaa 480  
 taacatttca ctcggaagtc cgattgagtc ccgtaatata ttcgagacgc tcgaaattta 540  
 aaaccaaagc tcgtagcaaa t 561

<210> 5436  
 <211> 598  
 <212> DNA  
 <213> Glycine max

<400> 5436

tttgctcatt tgatgttTg aagttgttga taatttgcatt ttctagatga aataagccat 60  
 gttctcttTg gtcaggatga ggtctgttag gagaacacaa accttTaaaca tcaatcggac 120  
 tatacctttc tcttcaaTc cagcgatcaa ctgtgtaggc agaaattTgg agaagtatca 180  
 acttggtggg gtcataTTTg gttgcaagaa tagtacttta aaagaatgTc aatcaaaaca 240  
 actctttggT tagtatttct ttcttttgct ttcttttatt gtaacattTg taatagatta 300  
 acagtaatta gtatgagttt aaaggattaa tgaatcaatg atttgtgttt taacaggctt 360  
 accaacaac cacttttcct atgtgaagaa tattgatcct ggtctgccta tattcttatt 420  
 caactatagt gacaggaagc tccatggaat atttgaggca tctagcaagg ggaaaatgta 480  
 catagaccct tatgcatgga ttgatgataa ttcagattTg gatagaacac agtatcctgc 540  
 acaggatca cttgttatat cttcttatca actctatctc acaagggtca taatgata 598

<210> 5437  
 <211> 514  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 5437

agcttagaga aatatgtcaa atatcgatct taaagaaaac taacaagaaa gaaaaaaagt 60  
taaaagcatt gagcaaaaaa acaaaacaata aatttaaaca aaatgccaga aatgtgattg 120  
aaaactgaga gaaaagatat aacgtggatt gataagaaga atagcaacaa agtaagacat 180  
ttagaaaata gggaaataaa aataaaggaa acaataaagg caaggaatta aataaataat 240  
taccattact gggaatgtaa agcttatgac atgtaagaaa gaactgtata tcggcaagta 300  
aataaatgga tagaaaataa cttanggtgt gtttggtaga gaggaatgaa aagggatgaa 360  
agtgtgagga atgaaaagag atgaaagaga gtgtaaagtg aagttgtttg attgagatga 420  
aagagagtgt aaaagagatg aaagatttaa attaaagttg taggcaaata ataaaagtaa 480  
ctaaactaga gatggagcac ttattaaaaa atag 514

<210> 5438

<211> 496

<212> DNA

<213> Glycine max

<400> 5438

agctttatag tgatcctttt caaaagcttt gtcttgaaat tgatcactca cactaatcaa 60  
gtcattctca agaaattttg tatttcttga ttccacaatc ctagtgctat gtgatggaca 120  
ataaaatcta tacccttttg acttttcagc atatccaatg aaatactcac taatagtcct 180  
agggtctagt ttcttctctt gtgggttata aacactcact tcagatgggc atcccaaac 240  
acgtatatgt cacaaactca gtttctaacc ttttaacttg aaagggtgtct ttaagacaac 300  
cttgattgga actcgattta atgtatacat agtcatcttt aatgcttcaa tccacaagaa 360  
ttaaggaggt tttctattac ttctcact tcttaccatg tccattaaag ttcggtttct 420  
tctttttgcc acaccattct gatccggaga accaggcata gtgtactggg caaaaatctc 480  
atgtttttga agaaac 496

<210> 5439

<211> 574

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5439

ttctaagcat ttttttgggc cattccagat cctcgagcga atctgacccg tagcctatcg 60  
 gctcctcctt gcaccggagt cactgataca ccccggtgtt cactgctttc tcctccgccc 120  
 tcatcacggt tccccacccg ccaccacgta cacatggccc ttacagggtc gagatgacca 180  
 gccctcagg cgtccgctgt gtttccttga ctataaagac gacaccgca ccacccacc 240  
 aacacgaatg gtccttacc aatgggaagg cgagccaccg gaggacacct cgtgggaaaa 300  
 atgggtctgac ctatgccagg cctaccacct tgaggacaag gtgggttttcg gggaggacgg 360  
 tagtgtttagc aatgccggca actacaactc cgatagcgag catctccgtc acgacaccaa 420  
 cccaagacca gtacgtatca ggggagcgcc agcacgtctg cgagattatc acgtgcaata 480  
 cctaccagga acaaaaggat aggtcgtac atacgataat agcaggtgca tgtacagaat 540  
 canggaatg cacacgtgat ctaatacaca cgtg 574

<210> 5440  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<400> 5440

tcaagatgta gttaagaccc ctgacaactt ctgttcgtgt tttaggcttg atagaaacac 60  
 agatgttaga tataataata tgaggaaggt tgcttctcgt gcagattcca gggacaacta 120  
 tttatactgt cctagggctg tcgatctaca ggatgaggat ttaaggcatt ttcagcggca 180  
 ttgggaaaag ggggagcctg tcattgtcag caacgtgctt gcaaaaacat ctggtttaag 240  
 ctgggaacca cttgtcatgt ggccgtgcat tccgtcagat gactaagacc aagcatgaac 300  
 aacatttgga tgtgaaagca atcgattgct tacattgggt cgaggtttgc gtaacatctc 360  
 aatcttgaac tgtgagggat atttgcacaa attccattgc tcacatacat atatgtgaag 420  
 cttatgttga taatgtttaa t 441

<210> 5441  
 <211> 655  
 <212> DNA  
 <213> Glycine max

<400> 5441

agctttacat tcttccaagt tctaccttct ttacaagatc cttcaattgc tttcttcctt 60

gaagcatgcg caaaccaggg gtattgggtg atgaaacatt aatcacctag aaaaggatat 120  
 taaaaacatt aacagaata gattaccaa catgtgtctt acaaatttgt agtaagctgc 180  
 acagatgctt gattaaaaaa aattggaatc cctatgtcag ttgttttttg ccatccattt 240  
 ctacttttc taaaccaggg aattggcaat ggaggtgaca acacccttga aagaaacaca 300  
 tttgttgaac atcaaggaca acctaaaaac ataatccttc aaattggatg atcaatcata 360  
 ctactcacat catgttctgg tgaaagggtt ggggtgggaaa tttggaggat gtaaaaccgt 420  
 tcccattgct gagtttccat cctttcattt ctccataatg aacttaaaaa aaatgaccgg 480  
 tgattttaag ctggcagtaa aggcaatgat cctgggtata aatcttagat ctcttttagtc 540  
 attatacacc acaacacttc tgttccttag taaaccaaca ttttatatag aagatgtatc 600  
 tttcaatag ttaacttttg tatgcaatta cacataatac cgataatgaa tgatg 655

<210> 5442  
 <211> 616  
 <212> DNA  
 <213> Glycine max

<400> 5442

tgtattcaag ttcaaaagac ggaaagcata gtgcattgtt ctgtttgaat aattttaaat 60  
 agtactactt gctttaccac tagtttataa taatgggttt gtatgttggg tatcttttgt 120  
 tgtttttcac ttttgattgg taagtaatgt ttttcctcct cttgggttttg acaaaaagct 180  
 acactgttcg ttcctttggg attagaagaa atgagaagat tgcattgctat gtcactatca 240  
 gaggttaacaa ggcgatgcaa cttttggaga gtggtttgca agtgaaggaa tatgaacttc 300  
 tcaaaaggaa cttagtgat actgggttgc ttggcctttg tgttcatgag catattgatt 360  
 tgggaatcaa gtaagttgaa gaaatctttg attttttcta ttttttttac tttttcctga 420  
 ggtaaacatt ttacgacaga cgtgaagttg aagatttgat atatgttgtg gtgtgcacaa 480  
 tgcatttca ctttatactg cattccactt ttgacttaaa ccaaagtcta actgggtgat 540  
 taatatagga gtttcaaaat tttctttcgt tgttttggac tttgggtgctt atataaattt 600  
 tttttttttt gatatt 616

<210> 5443  
 <211> 454



<212> DNA  
<213> Glycine max

<400> 5443

agctttaagg actgaaaaca gagaattttt tgttaaaaaa ttcattattc tttctgcaaa 60  
aattctttta taaatccttg taaagttaaa aaaaatctca aaataccttg aacatattga 120  
gagaaaagga ctaagcactt atttgtatat tcgtctataa gacatttcta cactactaca 180  
atztatagat ttaacatcgc aagggttaaca tcggttattc acaaaaccga tgtaacaaa 240  
agcacggtga catttttgta aataagtaga cttagttaac atcggttttg gaaaaaccga 300  
tgtagtatc tcgttaacat cagtttgga aaaaccgatg ttatcgagtt gatgtaaca 360  
ttcgattttt tacctagttg atggtaacat cggttatttt aaaaaaatg aatgttctat 420  
cattatatat taaaaatctg gaattgcaca accc 454

<210> 5444  
<211> 439  
<212> DNA  
<213> Glycine max

<400> 5444

ttgaataccc caaggatcaa ttaggaaatt acttgtgaaa gtattattct catgaggatg 60  
ggctcatggg ccactttggg atagacaaga tgtccataag cattgcacta ggtgtgtggc 120  
ttgtttacaa gccaagtcta ggggtgattcc ttatgggcta tacacacct taccatccc 180  
ctctgcacct tgggtagaca ttagtatgga ctttgtcctt gggcttcta gaacccaaag 240  
agggttagac tctatctttg tgggtggtgga taggtttagc aagatggcac actttatacc 300  
atgccacaag gtatatgatg cttcccacat ctcaaaaatc ttttttaggg aaagtgtgag 360  
actccatggt ttgtctagga ccattgtgtc agatagagat gctaagttcc ttagccattt 420  
ttgaaaacc ttatgggct 439

<210> 5445  
<211> 622  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5445

agctttgtta ctgttgcac aaacttggtta ttgatcttg aaataactat gtttcctaga 60  
 catttaatta ccttttggtg attcctgtgc aaacatgttt acttgtgttg ttatcctttc 120  
 catttacttg gataagactt tgatatttaa ttgttaattt tactaaggat gtcctcctct 180  
 acaagtgcctt atattttgaa actatttcta tgtgatgggt gtgctggaaa tggttttggt 240  
 aatttatgct taattattat ttagaaggag taagtttgta aattataact ataaattttt 300  
 ataaaataca ttgttttgta acttactaaa ttttccctt taaagagtaa gtgtatgcta 360  
 gtaagtgtgt ataatacttg ttaacttaca ctcaattttt caaagaagta agttaacaag 420  
 ttattattat taaattttct taaagtacgg tcaggtaaca cttattaaat tacaccttca 480  
 aaataatgat tactaatgta gatgggtgta ttcgttcgta ttttttaact agataatttc 540  
 attntcagca atattttatt ttacaaatat ttaaattcat tatttaggta aaataaaaaa 600  
 atttacataa atatcatgaa ct 622

<210> 5446  
 <211> 586  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5446

agcttgccca gagaatgagt ccacggagga tatgcttacc acctcaaaag actggaaagc 60  
 agtttctaata gactcctctg ctgcctccac ataaggcata gaggatgggc aactcaccaa 120  
 gatattctcc ttgcctgata cgatgaccaa atgtccttgc actacgaatt tcaacttttg 180  
 gtggagtgtg gagggaaaca ctccactga gtggatccac gggcgcccca acagacagct 240  
 ttaggggggg ttaatgtcca ttatttgga ggtgacttga caggtgtgag ggcctatctg 300  
 tactgggaga tcgatctctc ccctaacctc tcggcgggtg ccgtcgaaag cacgaactac 360  
 cattgaactt ggctttaagt gggaggcttt gaatggtaat ttgtccaaag tgctcttagg 420  
 catcacgttt aaactggaac cattatcgat gagcacttgc gctacgatat ggtccatata 480  
 cttgactgat acgtgcaaag ccttattatg cctctcccc tcggcgngna tttcttcttt 540  
 ggcgaaagcg agatagtntg tgggcatgat attgttgatc aaccct 586

<210> 5447  
 <211> 533

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5447

tcttagtctc agatgatgca actgagtttg tagctacctc atgaactcct ctaataacta 60  
tggcatcatt tctggcgcta aactgctgaa agttggaagc catcttctca attaaatttc 120  
tagcttcagc aggagtcatg tctccaaggg ctccaccact ggcagcatct atcatacttc 180  
tctccatatt actgagtcct tcataaaaaat attggagaag aagctgctct gaaatctgat 240  
ggtgagggca actggcgcat agttatttaa attgctccca gtactcatac aggctctctc 300  
cactgagttg tctaatacct gagatatact tcttgatggc tgtggtcctg gaagcaggga 360  
aatttttttc taagaatact ctcttaaggt cgtcccagct cgtgatggac cttggagcaa 420  
ggtaatacag ccagtccttt gccactccct ctaatgaatg aggaaaagcc ttcagaaata 480  
tgtgatactc ttggacatct ggnngtttca tgggtggagca gacaatatga aat 533

<210> 5448  
<211> 581  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5448

agctttcata aaaaatgagt gatattttat tatttatttt cacaataaat caagggtata 60  
aaaagaactt agcaattgat acatttaaaa aggttgatg tttcttataa ttaaaagaat 120  
aaaatatcat cattgggtct tatacaaagg acatttataa tgttttaatt attttttctc 180  
tcctttggtt gtatatttca tacactatct ctctaaccag ccaaagaaa ttctctctca 240  
atcatttcaa attgtcttaa ttaatttctt ttatcattta aaaatggtag gactagtatg 300  
agaaataaag ttattttttt agtatttaac gtaactacgt atttaaaagt tgagactatt 360  
ggttaagctg aaatgatatc atgtcagttg atttatgcac ccgatgatat aattttattct 420  
ttttaatcta ccatatttta tctttatctt taaattgaaa ttaaataatn ttttaaaaga 480  
atatgtcaac agttaaaaaat aaattcatat tacaatttaa attattcatt gagtacaaaa 540  
taatttatat attgaaatat atttattatt aaaaaattta a 581

<210> 5449  
 <211> 609  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5449

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 atcaccttca acgtttcatt gtcaatcctc aaattcctct ctgttttctt tctgcagaag 120  
 aatgtgaagc tggactgggt gccaaagggt ttaatcaagt taaaggcttt gatttttcag 180  
 aaactttttc tccagttgtg aagcctatta ctattaggct tattttaact ctagcaatca 240  
 caaatcaatg ggtgcttgct cagctagatg caaataatgc ctttcttaat ggcttgctta 300  
 aatgagactg tctacatgtc tcaactccct ggtttccaac aatcaaatcc ttctctggtc 360  
 tgtaaactaa ataaagcctt gtatgggttc aaacaagccc caagacaatg gtngagagg 420  
 ctgcaatctg ctctaactta gtttggtttt gtggctagta agtgtgatcc ctctctcttt 480  
 gttttcaaga cttcatctca ctgtgtatct tttagtttat gtggatgata tcaccttac 540  
 tagcaagtcc actcaatttg atcagcacct gacatctaac ctaattcaaa gtttttctta 600  
 aacaactcg 609

<210> 5450  
 <211> 450  
 <212> DNA  
 <213> Glycine max  
  
 <400> 5450

tcccttggtc aattttgagc gtctcaatat attatgcgt tgtttcagac atctgagttg 60  
 aatgttatgt ccatttgaat ttctcgagag ctccggttgt tcaatgtgga gcgtctcgag 120  
 ttattatgcg cctgagtcgg accttcgagt gaaaagttat gaccatttga attgctcaag 180  
 agctgccatt gaccaatttc tgagcgtctc tatatattat gcgcctgacc cggacctgcg 240  
 tgtgaaaagt tatgaccatt tgaattgctc aagagctgac attgttctat ttacagcgtc 300  
 tcgatgtata atgcgcctga atcgacctc cgagtgtaaa gttgtgacca tttgaatttc 360  
 tcgatagggt tcattgctca gtttcgagcg tctagatata ttatgcgcct gaatctgacc 420  
 tccgtgtgaa aagttatgac catttgaatt 450

<210> 5451  
 <211> 509  
 <212> DNA  
 <213> Glycine max

<400> 5451

agctttcatt gttcaatttc gagcatcttg ttatattatg cgctgaatc ggaccttcga 60  
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 cgatatatta tgcgcctgaa tcggacctcc gaggtaaaag ttatgaccat ttgaatttct 180  
 cgagagcttt cgttgttcaa tatcgagcgt ctgatatag tatgcgcctg aatcggacct 240  
 ctgagtgaag agtaatgacc atttgaattg ctcaagagct ttcattgttc aatttcgagc 300  
 gtcttgatat attacgcgcc tgaatcggac ctctagttg aaagatatga ccatttcaat 360  
 ttctcgagag ctttcgttgt tcaatatcga gcgtctcgat atattatgcg cctgaatcgg 420  
 acctctgagt gaaaagtaat gaccatttga atttctcgag agcttccgat ggtcaatttc 480  
 gagcgtctcg atatattatg cgctgaat 509

<210> 5452  
 <211> 589  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5452

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 tgaagcttgc tagaaaggga aacaagtaaa aagttctttc aaagtcaaaa atgttggttc 120  
 cacttattgg ccgttagagc tctccacct tgacctattt ggaccaacca atactacatc 180  
 cctcactgga catagacatg gtctagtcac aatgaatgat tacaccagat ggacatgggt 240  
 catgttctta acccacaagg atgaatcttt tgatgccttc tataaatttt ataaaagaat 300  
 tcaaaattaa aaagtttttt tatatttgta tctcttcaat cagaaacgac cataggggag 360  
 agtttgaaaa taatctttat tgaaaacttt tatgaagaga atgatattca ccataactat 420  
 tccactccaa gaaccacaca acaaaatgga gttattgaga aaaaaaatag acctcttcaa 480  
 taaatggcta gaaccatgct taacgactac tctaccctta aacgcttcta ggctgaagca 540  
 atanacatta cctattacat atagaaaaaa tttatatatg tcaatctta 589

<210> 5453  
 <211> 463  
 <212> DNA  
 <213> Glycine max

<400> 5453

agcttgcatt gttaattgta gtatttgtgt ttcttgcttt tctcattgaa attcatgtgt 60  
 ttcatcatat tgggtgctaa gatattgttt actttagggg taggccttgg ccagattagt 120  
 agaagaaata gctcaatgtg gtattccaga aggttcaagg aagatcaatg gaaagtacat 180  
 tcattctcac ctgttgcta gattagaagg tatattggta ttgctctaa ctattactca 240  
 cgattagagc ctaccctata tgattaacaa gagtacttcc tagttctgga taactatgtg 300  
 ttaatgtttg tgtggaatat gctaataaag cttctcaaca atgtcttttt ttccaactt 360  
 tgccctat ttgtcccttat cagtgc aaatgc attgtttt ttccctacata gttgtaa atg 420  
 aacaactgaa ggaaaaaata taggatgtcg gtacgacata atc 463

<210> 5454  
 <211> 562  
 <212> DNA  
 <213> Glycine max

<400> 5454

taagctcctt caactgcaca aggcctcttaa tatttgaaga gtatccttgt ggaaccttca 60  
 cccgacgaaa acttatcttc tccttcttgg acaaagtatg gcaggctggg ggcaagtaaa 120  
 ttttcttccc atcagacctt ggatgcaact gtgatcttat acccatatta gctagatctt 180  
 gacgggtatt caagccatcc ttcgtcttgc cttgaatgtt aaggagcgcc ccaatcacac 240  
 tatcaciaaac atttttctcc acatgcataa catcaataca atgtctaacy tcaagatcac 300  
 accagtacgg aagatcaaag aaaatggacc tcttcttcca tatgcaactt tgacttttat 360  
 ccttcttttg ggtcttccca aatacagtat tcagggtgtc aaccgctga tatacctgct 420  
 caccagtcaa cggatcggg gcaatatcat gctcttgact tccattaaaa agcttttctc 480  
 agtcgtctat aaggatgatt ggggtgttaga aagcgggtgat gcctactgta gaactat ttt 540  
 tctccatgtt taagttgtat gt 562

<210> 5455  
 <211> 487  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5455

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 atgagtgact tcaagcattt ttcataattc ctttacactt ttccaccttg tagtatgaaa 120  
 gaattcatca gaagataaac cagaagttaa aatgttttta gcttttttat catcttgccc 180  
 ttttcttttc tcatcatctt tcatctcttc ccatttttta ggtaccaatt caccatttac 240  
 ttcttttagtt ggtgtaaaag tacctttaac aatagcattc catgcatcgg ggtcaattga 300  
 ctgaataaag atttccattc tcttttgcca aaaagaaaaa tgttccgcct caaacaagg 360  
 atgtcgattt aaagatgcac cctctttgaa aatgatttgt ttgagccca ctnttagaaa 420  
 anttgatgc ttgagtaact tacaatatgt agctctgata ccaattgaaa aagatgatgg 480  
 aactcac 487

<210> 5456  
 <211> 261  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5456

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 ctaagaatag tcaaacgaca ataacccttg actcggatgt ccgattgagt cccgtaggat 120  
 atcgagacgc tgcgaattga naacggaagc tctgagaana atcaaacgac aataactntt 180  
 aactcggatg tccgatcgag ccctgtaata tatcgagacg ctcgaaagtg aaaacggaag 240  
 ctctaagaat agtcaaacga c 261

<210> 5457  
 <211> 334  
 <212> DNA  
 <213> Glycine max

<400> 5457

ctcgtcttct tctatagtc agtcttcttc tggcttcaat tcttcagtgg gctatccttc 60

tgtgtccagc atcttgtgat gtccccagac tttgatgaca gctctacagg ttctgatatc 120  
 caaagatttg aggaaggcca ccattcttgc tgtacaatat atatagttgc ttccatcgag 180  
 aattggtgga ctgatcactg gaccgccttc tttcttcatg ttcatcagaa tttatctgcc 240  
 tagatctcac tctgtgattt cgagtgttgg ctctgatacc aattgaaatt ctgataccag 300  
 cggacagatg tcgtaccgga tgtcacgaca tcac 334

<210> 5458  
 <211> 212  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5458

acatgcacag tggccaaaga tgcattgggag atcctgaaaa ccactcatga aggaacctcc 60  
 aaagtgaaga tgtccacatg gcaactatng gctaccaaat tccaaaatct gaagatgaat 120  
 gaggaagagt gtattcatga cttccacatg aacattcttg aaattgccaa tgctagcact 180  
 ggcttgggag aaagaatgat agatgaaaag ct 212

<210> 5459  
 <211> 350  
 <212> DNA  
 <213> Glycine max  
 <400> 5459

cgcatagtat atcaagatgc gtcgaaataa acatcaaagt gcaaggcaaa ttcaaacggt 60  
 cataactttc gactcggaag ttcgattcag gtaaataata tatcgagtcg ctcgataatt 120  
 aaacaacgga aagtcacaag acattttaa atgggtgtaact tttcacctgg atgccccgatt 180  
 caggcgcata gtatatcgag atgctagaaa ttaaacaatca gaggcgaagg cagaatcaaa 240  
 cggcccataa ctttgagtcg gatgtccgat tcaggccaat aatatatcga gtcgctcgaa 300  
 aatgaacaac ggaagctctc agctatctca tatggcataa cttttcactc 350

<210> 5460  
 <211> 295  
 <212> DNA  
 <213> Glycine max



1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379</
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<210>	5461
<211>	298
<212>	DNA
<213>	Glycine max

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gcttccaatg	tactaaaatc	cttcacaaat	cgcctataaa	aacttgctag	gccatgaaaa	120
cttctcacct	cggtcacact	tttaggtgag	gccactcttg	gatagcctta	accttttctt	180
catncaactn	gtacccttgg	gaagtcacta	caaaaccaag	aaacacaaca	tggtctttca	240
aaaataatgc	atntttcaag	gttagcatac	aatngttccc	ttctaagcac	acacaaca	298

<210>	5462
<211>	154
<212>	DNA
<213>	Glycine max

cagtttcgag cctctcgaaa tattatgcgc ctgaatcgga catccgtgtg anaagttatg 60  
accatntgaa tntctcgaga gcttccgatg ttttaatttcg agcgactcga tatattatga 120  
gcctgaatcg gagcctcgtg tggaaagtta tgac 154

<210>	5463
<211>	327
<212>	DNA
<213>	Glycine max

2357

<400> 5463

tttggaccca tgagctaagt atgagcccac ttatctttgt acatattaga ttanggtttc 60  
attatttctg ggccttgat ttagggcttc ataatgtatg gagggtaacc tagtaatgta 120  
ngatgtttca gcccttgat ttagggcacc tagaactagt tttgtattaa ggatagtttt 180  
gtaatttcac atgcattaag tgtgaatata tgatgtcctt catgctttac atgtctcatg 240  
acacctaagc acacttagtg gagaatcttg gactcgatct tggattagtg ggctgaacca 300  
tagctganat tcactaatcg taattag 327

<210> 5464

<211> 365

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5464

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aactgctttg ggtcgttttg ctcgaactgg tctgctncat aagcaagcat gtttggcttc 120  
acacaccac tccctaagc caccaagtag agtgctacat agaatatcat ggccttcacg 180  
ctcttggtt ctacgcactg ttctccatca gtcacattgc atggangtgg cttcaattga 240  
ggaacatgag cttggactga tagcagtatg aaaccgtgga atcgattat atatacatga 300  
ctaanggtc tcgatcaatg gcaataatat attntgttag agagagagag agagagagaa 360  
gagat 365

<210> 5465

<211> 483

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5465

ttgaattcta gtccccctta tagactctgt gaagatgtn gctagttggt cattagaacc 60  
tatcaaattt gtaatgagtt ctcttgaaa aaccttttcc tgaatgaaat gacnaataaa 120  
tttaatatgc atagttcatc catgaaacat catattggtg gctatatgaa gagctntgct 180  
tgattgtcac aacataattt cacctattgg atgtctctaa acttcaattc ttgaaggaga 240

tatttaatcc aaacgtgtgc acaagtagct gtacacatat ncttatactc tacttctgca 300  
 cgggtgcagta acattgtgct ttactcttc aagagacata ttctccata ggtcacaatc 360  
 cccaaaacac attgtcatgg cgactgcca ctatatacaa atcttgcttg aggaatcctg 420  
 cctgtgctnt atttatatac ttaaggcgtg ttaagatcta tgatccaaaa tcatctatat 480  
 ata 483

<210> 5466  
 <211> 251  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5466

tctctctaac cttactctng aatntacatc tcatagtggg gattacttca gagactaaga 60  
 gaacgttgct aagaatagaa cgatcttcaa cataagttta ttggtattgg gaaatgcatt 120  
 tggtaaggat gtgtttaagc ccattggcta ggaccttgaa aatgaattta tagataacat 180  
 tgcaaaggaa taagagccca aagtttttca tagtagtggg actacatttt ttggggataa 240  
 ggacaatgga t 251

<210> 5467  
 <211> 266  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5467

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 gtgtgagtca ttggcttgta gtntgtagaa tccttagata catcanaggg tcacctagaa 120  
 aggacgttg ttacactgac aggggacata gtaacattat tggatactca catgaagact 180  
 cggctggaga tgcangagat agacaatcca cttcaagcaa ttgtattttt gtgggttgaa 240  
 atcttatctc atggaagtgt aaaaag 266

<210> 5468  
 <211> 310  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5468

ccttcacccg acgaagacac tgacaaagac ttatctcttc cttcttggac anagtatggc 60  
aggctggggg caagtaaatt atcttcccat cagaccttgg atgcaactga gatcgtatac 120  
ccatatcagc tagatcttga caggtattca agccatcctt cgtcttgcct tgaatgttaa 180  
ggagcgtccc aatcacactg tcacaaacat tnttctccac atgcataaca tcaatacaat 240  
gtctaacgtc aagaacacac cagtacggaa gatcagagag natggacctc ttcttacata 300  
tgcaactctg 310

<210> 5469  
<211> 523  
<212> DNA  
<213> Glycine max

<400> 5469  
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attaaagaca tgtaatttta attgaataat aaatgcgagt ctttattagg aggtgtgatt 120  
aattcattta atataataaa tgggcggtatt attcaggagg tagttgaaga tttgatttat 180  
tctagactat tactttttgt tgaacaactg acctcaataa ctttaagaggg ggtgaattaa 240  
ttaaatttta aaattttccc gctaacaaat tttaaccccc ttttaaataa tacatgatag 300  
actcagaatg cagaagaaga agaagaaaca atcaatttaa taatgttctt ttaaatgcgc 360  
aagacaaagt aaactgcaat aaaataactg agataaggga agagagaatt gcaaaatcat 420  
tttatactgg tttggccact ccccggtgct acgtccagtc cttaaacaac ccacttgaga 480  
ttttcactat ctttgtaaac tctgtacaac ttctgaacac atc 523

<210> 5470  
<211> 510  
<212> DNA  
<213> Glycine max

<400> 5470  
agcttgaaat tcagaaccga agctctgagc aaaatcaaat gacaataact ttttactcgg 60  
atggccgatt gtgtcgcgta gtgtatcgag acgcttgaaa ttcagaacaa aagctctgag 120  
caaaatcaaa caacaataac tttttacacg gatgtccgaa tgaatgccgt aatatatcga 180

gacgctcgat cttgaaaacg gaagctctga gcaaattcaa aagacaataa ctttttacta 240  
 ggatgtctga ttgagtcctg tagtatatcg agatgctcga cattcataac agaagctctg 300  
 agcaaaatga aacgacaaca acttttttact cggatgtctg attgtgtccc gtagtatatc 360  
 gagactctcg aaattcagaa cagacgctct gagcaaaatc aaacgacaat aacgttgtac 420  
 tcggatggtc cgatggatcc cgtagtgtat cgagacgctt gaaattcaga acagaagctc 480  
 tgagcagaat caaacgacaa taacttttta 510

<210> 5471  
 <211> 638  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5471

taagggacgt gaggtcttga aggaactacc tcttttaggtt gtaaaactct atgaggagat 60  
 agaaaccttg agagataaac taggaaaatt tattggtggt catgaagccc ttaacaaaat 120  
 tattaagggtg caaagaaacc cttaaagacaa atttagccat gctttcaaag gcaaaaagat 180  
 tgtacatggt gaagaagtta ttgtttgcta tttttgtgga aaaatgggtc acaaaaactca 240  
 taagtgaag gatctcccta caaagggaaa cccatcaaag ggtttgtcca gtgcttacca 300  
 acatccacaa gcaacaagg aaaaaggacc caaaaagatt tgggtagcta agaataaaat 360  
 aattcctatt acagacctnc ttgatagtag gaaagaaaca ccattgatgg tacctggaca 420  
 gtggctgctc gcaacacatg atagtcaaaa agtctatgtt ctgatcccta agccctatgt 480  
 ctagtggggt tgccactttt ggaggggaata aaaaagggtc gataactggt gtaggtaaaa 540  
 gttgcattcc tccctatcct tctatagata antgtttact ttgttaaagg gtgaagcata 600  
 atttgctaag cataaatcaa ttatgtgaca gtggatat 638

<210> 5472  
 <211> 634  
 <212> DNA  
 <213> Glycine max

<400> 5472

agcttcctgt cgccagtgat ccacacatta taccaatgat ctcttaagtt gataaccatta 60

ggatattcaa acaataccct ctcataagtt gataccacat caccatcata ttacataata 120  
 gcaacgactc cctccatctt caacccaata tggtgaaata tcaaaacaat gcaatgaatc 180  
 agaccacttg tatttattag catcttatat tgtgagtcaa ttatcaacaa caaccaagat 240  
 tgcacgacaa aatataagat tcaaattaca ttgagctcta caaggacatt gttggcttgt 300  
 cagactgtca taaatatgat tgctaaatca caatataaaa cattaagttt tactttttta 360  
 aaattaaaac acttaaaaaa acacaatgaa atcataattc ctttgtatta atcaatacaa 420  
 cggaatcatg atttcattcc ctagtcaggg taaaaataaa ataaccaaac aaaatcatac 480  
 tcttgttaca aatttgtgaa tgttatcaat aatacaacaa aatcatgatt ccattatggt 540  
 atttaacaat ataaaaaaat aacaataaaa atatgattat ggtgtacaag catttaacaa 600  
 aaacatattt tcattattaa tttttttcac ccca 634

<210> 5473  
 <211> 559  
 <212> DNA  
 <213> Glycine max

<400> 5473  
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 tgattggatt tgagaaagat tgattagaaa agtgtatatt gaaaagcaaa tcaaagcctt 120  
 gctgttatag actcttcatg tatggccaaa aggaccattt acagaaggta tcacttttag 180  
 aaaaacttaa aacaaatttg aaaaagtcac aaaccttttg aagagttaca tcttttgatt 240  
 tattcagaaa caatcactgg taatcgatta ccaaattagt gtaatcgatt acacaaggct 300  
 tttatgcgaa aggatgtgac tcttcacatt tgaatttgaa tttcaacggt caagggcact 360  
 agtaatcgat tacgaaaaca ttgtaatcga ttacaacttt ttgaaattaa ttggaatggt 420  
 gtaaattcag tttgaaaact ttttgaaatc catttttgcta ctggtaatca attacaataa 480  
 tctggtaatc gattaccaaa gagtaaaaac tatttggtta acatgttttg agaaaaatcc 540  
 atgtgctact cagttttttt 559

<210> 5474  
 <211> 507  
 <212> DNA  
 <213> Glycine max

<400> 5474

ttaacattta ttttacaggt attcataatg ttgatatttt tattcaagaa tttgatctac 60  
ttttaacccc agttgatgag atataagatg aatctaactg tagttctttt atcactgttt 120  
ttcaataaac tttgcctcaa aaaataaaat acaaggatca cctaattaca agcttttctaa 180  
attctaatta ctgattttta ggtttattta ctttttttta atctaaatta aaaatgttaa 240  
tctctatttt ttataattaa aaaaactttg agatcccttt cactgatgtt atctatgact 300  
ctatgtgttg atgctatcac ttggcaaagg aagaaattaa gagtaatcga atacacagaa 360  
gagtttatga ggtgctatct aaggctgcta gctcaaatcc aaaacacgct ggcttgaatg 420  
aacgcgagct ctattttgtc ttcttttgta agccaaatag ttttcaagag atgaaaagag 480  
cttggcatgt gtctgatgtg cactttg 507

<210> 5475

<211> 489

<212> DNA

<213> Glycine max

<400> 5475

agctttaaca acaattccct tctttttctt atcattttct tcgtgttgat ttaatctcaa 60  
cagttccatt tcgtgttcct gtaactttcc aaatagtgtg gcaagagaca tgtagttaa 120  
atctcgtgac tcagtaatgg ctgttacctt aggtgtccat tctctgctta aacatctcaa 180  
tactttattt atgagatctt catttggaat atttttccct aaagatgcaa gatgatttat 240  
tatatgtgta aacctttttt tgcattgtct gtatactttc atttgaattc attctaaata 300  
attcactatc atgagttaat gtatttatct tagatctttt cacatctgtt gcgccctcat 360  
gtgttacttg tagggatatcc cacatttttt ttgcactttt acaatttgat accctaaagt 420  
actcatccat tctaaggca gatgtaatta tatttttgac ttttaagttt gattgcacta 480  
atctctttt 489

<210> 5476

<211> 588

<212> DNA

<213> Glycine max

<400> 5476

agcttatgct gcaaataattt acaatagacc tctcaacct cagcagcaaa atcaaccaca 60  
 gcagaacaat tatgacctct ccagcaacag atacaaccct ggatggagga atcaccctaa 120  
 tctcagatgg tctagccctc agcaacaaca atagcagcct gtccttttct tccaaaatgt 180  
 tgttggtcca agcagaccgt acattcctcc accaatccaa caacagcaac agccccagaa 240  
 acagccaaca gttgaggccc ctccacaacc ttccctcgaa gaacttgtga ggcaaatac 300  
 tatgcagaac atgcagtttc aacaagagac cagagcttcc atttagagct tgactaatca 360  
 gataggacaa ttagctacac aattgaatca aaaaagtcc cagaattctg acaagctacc 420  
 ttctcaagct gtccaaaatc caaaaaatgt cagtgccatt tcattgacgt cgggaaagca 480  
 gtgtcaagga cctcaaccgg tagcaccttc ctcatctgca aatgaacctg ccaaacttca 540  
 ctctacttca aaaaagggtga agacaaaatt tacctacaat ttctgaca 588

<210> 5477  
 <211> 520  
 <212> DNA  
 <213> Glycine max

<400> 5477

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 ttttatcaaa tcttatctta tccagatttt attctatcta gattttattt catctcatct 120  
 catcttatct tatctaaatt ttattttatt tcatttatgg gttgggactt aaaatagatt 180  
 tgtaagcttt ggggctgagg acttatatat caacacaaag gttttagttt aggagacttt 240  
 tttcagagag gagaataatt ctaggatgtt agaatttcag tttttattac tgttcattgca 300  
 cattgttcac gtagaataaa attcattttt tgcaaatcat ctttgatcca tacatttgtt 360  
 catattatgc tgtttttatt ttctttggat atactttgcg ctttaacgac ttggaatcaa 420  
 tatgattttg gttatcaatt atttttggat ttgtcattac ttatacgaaa ttttataagt 480  
 ttctttttta ggtaggattt cactaggtgt taaaataatg 520

<210> 5478  
 <211> 508  
 <212> DNA  
 <213> Glycine max

<400> 5478



tatagaatat ataataaaag aacaatgaca attgaagagt ctatacatgt ttcctttgat 60  
gagtctaattg ccattcttcc aaggaaggat tttttagatg atatttcaga ttccttagaa 120  
gatacacata ttcattgaaa taactctaaa gaaaaagatg aaggaagcaa tgaagattct 180  
caagataatg gggctagagg aaataatgaa cttccaagag aatggaaagc ctcaagagat 240  
catccccctg acaacattat tggatgata tcaaaagggg taacaactag acattctctt 300  
aaagatttat gcaataatat ggcttttgta tctatgattg aacctaaaaa tataaaagaa 360  
gccatattag atgataactg gataattacc atgcaagaag aactgaatca atttgaaaga 420  
cataatgtgt gaaaactagt acaaaaacct gaaaattatc ctgtcatagg aacaaaaagg 480  
gttttttagaa ataaattaga tgaacatg 508

<210> 5479  
<211> 433  
<212> DNA  
<213> Glycine max

<400> 5479

ttagactagc cttgatagga atttgggtgac tcaactctgt tgtcattgct cagggcttgt 60  
tgtcatcatc tttgaatgta tcaaaactgc ttgaatcaac cttgattcat catcatgaag 120  
cttgcttcta caatagatag catgggtcat tgggttagcc atgtgcttag cattttccat 180  
gccgaatcta tgaataaact gtttgcggtg cttatattga ttgacaaaaa ttctagtctt 240  
ggatgtttta atttgtctat caagacaaaa attatatact cgcataatgg acatatcaaa 300  
ctgactttgc atgtcatgag agaagtcctt gcacaataat tcatgagtaa atctacaaat 360  
aatatcatca cacatatata tgaaccaaga aaacatcatg taatgttctc tttatgaaaa 420  
gagtaatatc tac 433

<210> 5480  
<211> 544  
<212> DNA  
<213> Glycine max

<400> 5480

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gccgacattg gaggttttgg ctttaaccatg ttaatcacca cctttgctgt gaagggcatt 120

aaccgtgtcc atgctgtggg atggatttgt gccattttta acattgcagt gtttgctgct 180  
cccttaagca taatggtaca ttctatattc aattattcac ataatataga tcttgcatag 240  
tttgatatgc aatctgaaat atgtaaaatc tgtacattaa ttgcagagga gggtcataaa 300  
aaccaaaagt gtagagttca tgccattttc attgtcctta tttcttacgc tctgcgccac 360  
catgtgggtt ttctatgggt tcttcgacaa ggatgacttc attatgggtga ggaataacac 420  
ttctatatct attactcatt ctactcattt tctcttgaaa gcaaactgat tagtggtttg 480  
ttttgtggat tatcagtttc ccatgtgtta agatttattt ttggcatctc tcaaagtatt 540  
ttat 544

<210> 5481  
<211> 639  
<212> DNA  
<213> Glycine max

<400> 5481  
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tctacttttt cacgtgagat aagggtttttt ataacatcag tttgataatt ttaaatgatt 120  
ttaaaaaatt gatctgtatt tttatagttt gaaaattatt ttaaatcctg tattttgtaa 180  
ttaaaaaaat ttaaaaaaat caaaatcaaa attcatacaa aatatgaaat aagcaatgat 240  
ttacgaaata tctaacgtat gctggaaaac atcggcgaca gaaaaaatct gaaaaataaa 300  
taacaaggat aacatttttt ccccgcaaaa aagcacttta tagtcagatg tagtttcaat 360  
attttaaata ataacattct cacattttaa aataaaataa aaattagaga atctcgtatc 420  
ttttcgtagt tatttatcca aatagtttta ctttagaata tataaaataa tcttatagct 480  
atttttatac taccctccta tcatatatac atgcataatc aagtatattt attaatttta 540  
ataataatct taaaaatcac ttatcaataa ttttataaat taattagtag agggatgttt 600  
acattagtaa tttttaatat tagattaaaa ttttaaaaa 639

<210> 5482  
<211> 477  
<212> DNA  
<213> Glycine max

<400> 5482

agctttacag cagatgcccc ttactccat gttcttgaag gatatgttaa caaggaaaca 60  
 taagtatatt caccaggaaa aaattgtagt ggaaggaaat tgtaatgttg tgattcaaaa 120  
 gatccttcca cccaagcata aagaccttgg gagtgttaact attccttggt caattagaga 180  
 agtcactgtg ggaaaagctc tgattgactt gggagccagc attaatTTaa tgtcattctc 240  
 catgtgcaga aggttgggag agttggagac catgcccact aagatgactt tacaactggg 300  
 tgaccgctcc attaccagac catatggagt aattaaagat gtgctgttca gagtgaaca 360  
 ttttatcttc ccgacagact gtgtggcaat ggatatctgt gaagatactg acattcctgt 420  
 catattggga aggccattca tgttaactgc aaactgcata tttgatatgg gtagaaa 477

<210> 5483  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<400> 5483  
 tatcaacatc aaacttggag aaagagttct tgggggtcaag acatgagaag caatcaagta 60  
 taatgttact tccttacta aagcggcgat ccatctccac acatatttta tcaatagcaa 120  
 cataaaaaat ctctgcacgg taatgatgaa gattagtgat agtctcctt tctgctcttg 180  
 aacgaccccg aactggtatt tcgtcatcca tatttggtag tagaatactt ttagcaacac 240  
 aaaatccttg gacatcggca aaaaaattat tccagccact ctctctcatt gtgcccaacc 300  
 gagctttgac aacatcaact aattccatgg cattcacaat attaatgatct tttctttgca 360  
 atatatttga aagctcgttt gtgataccaa acaactttaa cattaacctc aaaataaaaag 420  
 caaatTTaaa gctc 434

<210> 5484  
 <211> 489  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5484

cagcttgtat agaaggtgcg ttctaattt ctctacaatt gcatcacctc tcaatgagct 60  
 ggtgaaaaat aatgtggcat ttacctaggg tgaaaaacaa gagcaagcct ttgctttgct 120  
 caaagaaaag ctactaagg cacctgttct aactcttctt gacttttcta aaacttttga 180

gctagaatgt gatgcctctg gagggtggagt tggagctgta ttgttacaag gtgggcaccc 240  
tattgcttat tttagtgaag aacttcatag tgccaccctc aactacccca cctatgataa 300  
agagctctat gccttaataa gagccctcca aacttgggaa cattaccttg tttccaagga 360  
attgttcatt catagtgatc atcaatcact taagtacatt agagggcaaa gcaagttaaa 420  
caaaaggcat gcaacatggg tagagtacct anagcaattt ccctatgtta ttaaatacaa 480  
aaagggaag 489

<210> 5485  
<211> 546  
<212> DNA  
<213> Glycine max

<400> 5485  
caggacctta aaactcagct tcctgggaat atgtctaaga agttgagctt agctctcaca 60  
cctctctaag agctaagctc acctccttga gataagaagc tagagcttag ctacacaccc 120  
cctataatag ttaagctcac tcttatgccc aaaaacatga aaatacaaaa aagtcacctac 180  
taciaaagact actaaaaatg ccccgaaata caagactaaa accctatact actagaatgg 240  
ccaaaataca aggcccaaac aaaggaaaaa actattctaa tatttacaaa gataagcgag 300  
ctcactactta gcccatgagc ttgaaatcta ccctaaggct catgagaacc ctaagacctt 360  
cccttggtatc tctggcccaa tctacttggg gtcttctatc caatgccctt gcggtgtaag 420  
attgcatcat gataaaccaa cttcttaaag catttatgtg agtcaagtgg agttttaaaa 480  
tgtttcacaa agaaatgccc aagttatatt ggacaaagaa tatatagagt atctctcaac 540  
agaaca 546

<210> 5486  
<211> 532  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5486

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ttgtgtttgc tggatatcan agtggaggca taacataatg ttccaaaagt cctgaaatca 120

gcatagttag gaagtttagc atgtaaaatc acaaattggtg acttggtttt cagaatgggg 180  
ctatgggtcc tgttcatcaa gaaaactgca gttttgacac attcaccoca aaattttaat 240  
ggtaaataag attgaaacag caaggcacga acaacattta aaatatgaag tgtttccttt 300  
ctacaacatt gnttttctgt gggcgctcca cacaggaaaa ttggtgtagg acacatttct 360  
tcaaaaagaa atctgaaaag gcaagctctt ttgcattgtc agatctgaat cttttgatgg 420  
tggttttaaa ttgagtttcc acatatgaaa aaatttggtg tacaataagg agacaatcag 480  
attatttata aaaaagtata tccaatgaac ctacttttat catctactaa ag 532

<210> 5487  
<211> 469  
<212> DNA  
<213> Glycine max

<400> 5487

ttgagaaata tactacccca tgaagttcat caattagttc atcaacagtg ggaataggaa 60  
agttatcttt gattgtgatg gcattcaagg cctgtaatc tgtgcaaaat ctccaagtgc 120  
catccttctt cttgacaaga atgattggag gtgaaaaatg gcttctgcta ggggcaataa 180  
tcccttctt gagcatgtca gctatcatta attacttcaa tctgatcctt ccggctgtga 240  
ggatacctat atggcttgac ttttactggt ccagcacctt caaccaatgg gattgaatga 300  
ttgtgagttc ttctaggggg taatcctgat ggcacatcaa agactgttct ataagtgtaa 360  
agtaaacagt tccgcaatgg catgcgtatg ctgcattctt ctcaggtgat taaattgagc 420  
ctgttgtcat agagagggtg tctcaccatg caaggtgata aattgatta 469

<210> 5488  
<211> 503  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5488

agcttgtaat tttcagaaaa acaaatacct attcaacat atcaacatac taagacaatt 60  
caaggtgaaa tcaagagaca tagagagcaa tttaaaatag gttacgtgca ctacacaaca 120  
tcattcaatg ctagatccat ctaagatgcc tagatcattc cttataaaga agaacctatc 180  
tctagcaagt ggttttagtga atatatttgc tagttgatgc tcactatcaa tgaaatcaat 240

gcaacaatca ccttttgaaa catgatctct aagaaaatga tgtcttatct caatatgttt 300  
 ggtttttagaa tgcattgaaa gatttttggg taaattgatc gcacttgtgt tgtcacattg 360  
 taagggaatg tgatcaagga ttacattccc ttagaatgca tgacaagagg cctttatgag 420  
 ttctccattc tctagggaca tccataggag gtatggttga gatctttntg gttagttcat 480  
 gttctttcac tttggttttt atc 503

<210> 5489  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<400> 5489

tccatttgta tactgcaacc ataataagaa aaaagctttt tgtttccctt cctgtggatg 60  
 tagccttgat caaggtgaac cacgtaattc tgtgtgtgtt ctttctctat tttcttctct 120  
 ttcaccttgc tgcaaaaactc tgtgtgtatg acatagcttt ctgctgtttt tgttgttgtt 180  
 gttcttgctt gttcttcac accccataa tagataactt tctacctgtt tcatttgtcg 240  
 atgaggagtt ggataaactg ttttcaactg atttatcatc acgtgcacaa aacaagaaaa 300  
 ctgagatata caccagaatt ctttccatcc ttaataatgg tgtagttatt ggtgataaga 360  
 agtttgaatt tctagcattc tcatcaagtc agttgcggga aaactctctc tgaattgttg 420  
 ctctacaac aactggat 438

<210> 5490  
 <211> 630  
 <212> DNA  
 <213> Glycine max

<400> 5490

agcttaacaa aaggcatgag aagtgggttg aattcctaga gcaatttcct tatgttatca 60  
 aacataaaaa gggaaaagggt aatattgtag ccgatgctct ttctcggcgt catgcattac 120  
 tttctatgct tgaaacaaaa ttgattgggc ttgaatgttt gaaaagcatg tatgaaaatg 180  
 atgaaacttt tggagaaatt tttaaaaatt gtgaaaaatt ttcagaaaat ggtttcttta 240  
 gacatgaagg ctttcttttc aaagaaaaca aattgtgtgt gcctaaatgt tctactagaa 300  
 atttgcttgt ttgtgaagca catgaaggag gtttaatggg gcattttggg gtccaaaaga 360

ctctagaaac attacaagaa cattttttatt ggcctcatat gaaaaaggat gtgcagaaat 420  
 tttgtgaaca ttgcattgta tgtaaaaagg caaagtctaa ggtaaaacct catggattgt 480  
 atactccatt gccaatccg gagtattctt ggatgaatta ttcaatgaat tttgtttggg 540  
 gctgccaaaa acaaccaagg gtaaaaattc cattttttgtg gtgctgaaaa ggtttttctaa 600  
 aaagcttaat ttatttcatg taaaaaaaaat 630

<210> 5491  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5491

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 aagttctcca attatttaaa aacattacaa ttaaactaac ggaaataatg gaaaatgata 120  
 ccatcgtaat agtttttaaat aattgacgat tcaattaaat attttttaaac aaacttttta 180  
 attgaatttt taattataat taaaaaatca attgtatagt taaacttttt tctatcacct 240  
 tagatatcat atttgtcact cttataatat ttataatatt tatgcagatg cttgagtaat 300  
 tatgatgttg gttttcaatt aaaattaaaa tttgactaan atatgtttgt gataactgat 360  
 gaaatctaaa tttgtgggta ttccttaata ttttttcttt gttttgctct atgaggatat 420  
 cactaataat ttttatttta 440

<210> 5492  
 <211> 563  
 <212> DNA  
 <213> Glycine max

<400> 5492

agcttgcttg aatcaacatt tttcaattga tccaaattaa cttcaggtag tcttttgtca 60  
 actatgcaca tgataatatc tttctcaaac tcttcttaag ccaaaactga gaactctttg 120  
 ttattggtct cttctgagat ttcaaagttc ctccttgac acactatctc tagcaaaaca 180  
 accataactg taaacatcag attttgaagt tactgaaaga tttgggagcc attctggagc 240  
 tacataccct ttgggttcctc tcatatttaa cacggtttgg tacctgtcat ccttgggagc 300

tatgagcttt acaaggttga aatacgagag tttggcctcg aaatcctagt ccaagagaac 360  
 attttcaggt tttatgttga catatgcagt tatgacactc ttcatagaata tacatgatag 420  
 ttgacacccc cttgcgacgt ggtgaggggg cgtggctcgag tcccacatcg aataaaaata 480  
 gtgccgagat acactatatt agtggggagt aattctcacc ttacaagttg ggttttagg 540  
 attaagctaa actcatgaaa aat 563

<210> 5493  
 <211> 515  
 <212> DNA  
 <213> Glycine max

<400> 5493

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 agcagtgtac actgcttcag tccagaatgt gttaggtagt cccttctcct tgagcatcga 120  
 tctagctatt tccataactg tgcgattctt tctctcggac actccatttt gttgaggaga 180  
 atatgcgact ataagttgtc gctctatgcc ttcactctca caaaatattt caaactcgcg 240  
 agaggtgtac tctttgccgc gatcacttct tagtactttt atctattttc cactttgatt 300  
 ttcagcaacg gccttcaact ttttgaatac tccaaagact tctgattttt cttttagaaa 360  
 atatacccat gttattctaa agaagtcatt attgaagagt atgaagtacc agttgttctc 420  
 atgtgatggc agccttattg gtccacagac gttcgtatgt atcagctgcc atagatcttt 480  
 cgctctccat gctccgcttg ttgaaaaagg aaatc 515

<210> 5494  
 <211> 485  
 <212> DNA  
 <213> Glycine max

<400> 5494

cagctttgac atgttggata ttggcaacaa tttctatatg ggcaagctcg acattgaagc 60  
 agataggaca aaggtaatgg aggaaggccc ctagatgatc tttgatcact acctaacaat 120  
 tcatacttgg gcccaggatt ttatctccgc ggcgacaaag attgatgaaa ccctagtgtg 180  
 ggttcgattt cctggccttg accttttact atgatgaaag cattctcttg gctctggcaa 240  
 cgaccattgg caatccaatt agtggttaatt caaataccct acacataaga catggaaggg 300



ttgcgagagt ttgtgtgcaa attgatttgg acaaacctgt tgtggggaaa aattggctaa 360  
 agggtcactg gcatagagta gaatatgaaa gtttatacca cagctgtgcc tcatgtggtc 420  
 ggaatggta tttggctcga aactgcccta cttcattaca tgtagacacc catcattctt 480  
 cttcg 485

<210> 5495  
 <211> 527  
 <212> DNA  
 <213> Glycine max

<400> 5495

agcttttttg tggggagcaa taagggtgct gttgatgttc tccaatatgc tgatgatacg 60  
 atatttttcg gagaagcatc tatggcaa atgtcaaaactg tgaaggttat tctcaggagt 120  
 tttgagctgg tttctggatt gagaattaat tttgctaaaa gcaaatttgg agttgttggt 180  
 caatctgagg agtgggtgtct tcatgctgca aactatctta actgtgcttt ggttcaattt 240  
 cctttatggt atttaggaat tctgattggt gtcaatccca aaagaagggt ggtgtgggat 300  
 cctgtaatta ggaaatttga agataggctg aatagggtga ataagagaaa catatccatg 360  
 gctggcagac tactcttat taaggctgtc ttaacagcac tacctttggt ttacttaact 420  
 tttttcaggg ccctaaaaac agtcattaat aagggttatct tccattcaaa gacaattttt 480  
 gtggggaggt taaccagaag agaagaagat tgcctgggta tcttgga 527

<210> 5496  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<400> 5496

gctgcatgct gccatcttat gctgcaaca tgtacaattt actttctcaa cctctgcagc 60  
 ataatctacc tcagtgaac tattatgact ctctccagca acagatactg ccctggatgg 120  
 aggaatcatc ctaccctgag agggaccctc tatccactgc atcaacgggt gtctgttact 180  
 tacatacaaa atgtgtggagg cccaagctta ccatacatc cttcaccgaa acagcgctac 240  
 aacaacccca taaacaacca acagttgaag cctctccaca cccttctatg gaataacttg 300  
 cgaggccaat gactatgcac aacatgtaat tttagcacag agacc 345

<210> 5497  
 <211> 487  
 <212> DNA  
 <213> Glycine max

<400> 5497

tgaagtagag gagaccttca atcctagaac gtaacgtggc atacaaaagt gggcagttaa 60  
 cttgaatgac cattattttc aatgcggaaa gtattatgtt cttcactatc catgttcaca 120  
 cattattgct gcttgtgggt acgtgaacat gaattacttc caatatgtag atgttgttta 180  
 cacaaatgag cacatcctaa aagcttattc cgcgcaatgg tggcctcttg ggaatgaagc 240  
 gggtattcct ccttctgatg agcaatggac acttatccct gatccaagta caattcgtgc 300  
 gaaaggtcgg ccaaaatcaa caaggataag gaatgagatg gattggctgg aaccatctga 360  
 gcaccgacaa aaatgtagta gatgtggaag agaaggacac aacagacgtc gatgtccaat 420  
 gcaatctgaa tgtggaagtt gtaaaataat tgaattatgt attttggttg cctacttgaa 480  
 tgaaatg 487

<210> 5498  
 <211> 535  
 <212> DNA  
 <213> Glycine max

<400> 5498

agcttttggg aaaagaagaa gaaaaagttc atagagattc aaggcttgta aaggattgat 60  
 tggaaaagta aaagtgtgaa agaattaatt gattgaaaat gcaaaacaaa gccttgcttt 120  
 tatagactct tcatgtctgg tcaagaagac catttagaag aggtataact tttagaaaaa 180  
 ctttaaaacc aatttgaaaa agtcaaaaac cttttgaaga gttacatctt ttgatttatt 240  
 cagaaacagt cgctggtaat caattaccaa ataagtgtaa tgcattacac aaagctttta 300  
 tgtgataaga tgtgactctt cacatttgaa tttgaatttc aacgttcaaa ggtactggta 360  
 atcgattacc aaaacattgt aatcgattac aactttttga aaataattgg aacgttgtaa 420  
 attcaatttg aaaacttttt caaaacaatt ttgctactgg taatcgatta caacaatctg 480  
 gtaatcgatt actagagagt aaaaactctt tggtaaaggt ttttgttaga caagt 535

<210> 5499

<211> 313  
 <212> DNA  
 <213> Glycine max

<400> 5499

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 tcaactttat cagagagaaa tcagacacct ttgaagtatt caaagagttg agtctaagac 120  
 ttcaaagaga aaaagactgt cgtcccaaga gaaccacgag tgaccatggc agatagtctg 180  
 aaaaccgcaa gtttactgaa ctctgcacat ctgaaggcat cactcatgag ttctttgcag 240  
 ccattacacc acaacaaaat ggcataagtg aaaggaaaaa caggactttg caggaagctg 300  
 ctagggtcat gct 313

<210> 5500  
 <211> 545  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5500

agcttcaaga ataatggcct cagcaaactt cttattccca gaaggaaact ctataaatag 60  
 gcctcctatt tttaatgggg agggttacca ctactggaaa actcgaatgc aaattttcat 120  
 tgaggcaata gacttaaaca tttgagaagc catagaagtt ggaccttatg taccacccat 180  
 ggtggctggt aatacaacaa tagagaaaca tagagaagag tggctgaag aagaaagaag 240  
 attagtacaa tacaatttaa aggctaaaaa catcattact tctgccttag gaatggatga 300  
 atattttagg gtgtcaaatt gtaagagtgc taaggatatg tgggacactc tacaagttac 360  
 acatgagga acaactgatg tcaaaagatc taggataaat actctaactc atgagtatga 420  
 attatttagg atgaagacaa atganagttt acaagatata caaaaaagat tcacacatat 480  
 agttaaccat cttgattcat tangaagaac ttttcaaat gaagatctta taaataaagt 540  
 atttt 545

<210> 5501  
 <211> 559  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 5501

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gcaagttgaa agccttggag gaaagaggta tgcctatgtt gctgtggatg atttctccag 120  
atttacctgn gtcaacttta tcagagagaa atcagacacc tttgaagtat tcaaagagtt 180  
gagtctaaga cttcaaagag aaaaagactg tgtcatcaag agaattagga gtgaccatgg 240  
cagagagttt gaaaacagca agtttactga attctgcaca tctgaaggca tctactcatga 300  
gttcttttga gccattacac cacaacaaaa tggcatagtt gaaaggaaaa acaggacttt 360  
gcaggaagct gctatggtca tgcttcatgc caaagaactt ccctataatc tctgggctga 420  
agccatgaac acaacatgct atatccacaa cagagtcaca cttataagag ggactccgac 480  
cacactgtat gaaatctgga aaggaggagaa gccaaactgtc aagcacttcc acatcttttg 540  
aagtccatgt tacattttg 559

<210> 5502

<211> 385

<212> DNA

<213> Glycine max

<400> 5502

tgagcggtat accagctgcg gtgggctgca gctacgtcac atggacgtgg cggagcccgc 60  
gcatgtgctc atccttggag gagagatgtc tgcctatgtt gctctggatg atttctgatt 120  
agtgacctga ctgactatc tcttagataa gctttacgcc tttgtcatat gcttcgagtt 180  
gcatatctaa ctcaaattag aaatatactg tgtcatcgct agaattacag agtgaccatg 240  
gcagacagct cgaacacact taggacactg aatcctgcac atgtagtgca tctactcatga 300  
gctcgctgcc tccttggcag atcaagagcc tgtttttggc tatctgcata acactactgt 360  
gccagactgt gcttcggtgg tacgg 385

<210> 5503

<211> 568

<212> DNA

<213> Glycine max

<400> 5503

tgaccgagga taggaattcc tacccttacc ctaggaagaa agatcagaag aatctccaca 60

gaagaaaagg aaagaaaaga gaaagagaga atcacacaat ctaagattgg aggaaagcat 120  
 acgaaaaata gaaaaagaaa taacgaacaa tatgaaaaga ttctttggat cagacactgt 180  
 ctgaacaatg tgcagaattg tcaaaatgaa taagaaaagc ggggcttaca aaaatttggt 240  
 tgaaacctga gggatgcctg aagtattcac ctccatgctt gttccatgct gaaccaaaga 300  
 gaaaagagag atagaccgac aagggaaagg ccagaacacc caaaagccca aatttcccac 360  
 caaagttcaa cttgctaaaa agtcccattg atccatgttt tcacatgtta tctttgattt 420  
 gataggaaat gatttgcaaa gtcaagtcac gacatatttg tggttcggaa ttatgatgaa 480  
 acactttctt gtgtgagatt tatacactct gagtggttct cctctatttc agttggaccc 540  
 agagtttctt ctaaagctc attttgaa 568

<210> 5504  
 <211> 507  
 <212> DNA  
 <213> Glycine max

<400> 5504

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 gtcagcagag gagcacaac cacaaccct tgctacaagt acaaatttct gattcaaggc 120  
 cagctgggtt accaagttaa ccaatgcac cagtttgctt tcaagcttct tagtttcata 180  
 tgatgcagat gggttttag ctacctcatg cactcctcta atgactatgg catcatttct 240  
 ggcgctaaac tgctgggagt tggaagccat cttctcaatt aaatttctgg ctttagcagg 300  
 agtcatgtct ccaagggtc caccactggc agcatctatc atacttctct ccatattact 360  
 gagtcttca taaaaatatt ggagaagaag ctgttctgaa atctgatggt gggggcaact 420  
 ggcacatagt ttcttaaata tctcccaata ctcatcagg ctctctccac tgagttgtct 480  
 aatacctgag atatccttcc tgatggc 507

<210> 5505  
 <211> 475  
 <212> DNA  
 <213> Glycine max

<400> 5505

agcttctggt aggacatctt gacttgcttt ccaatctgac attcaccaca gattctgcct 60

tcttctatatt tcagattggg aatgcctcta acagcacctt tgtcaatgat tttcttcatg 120  
cctcttaagt gcagatgtcc aaatctttga tgccatattt cgacttcac cttcttggag 180  
gatagacatg tggaggagta actgggttct tgagggtgcc ataggtaaca gttgtccttt 240  
gatctgctgc ccttcattag aacttcactc ttctcatttg tcaccaagca ttctgacttt 300  
gtgaagctta cattgaatcc ttcatcacac aactgactga tgctgatcaa gtttgcagtc 360  
cgtcccttca ccagcagtac tttgttcaga ctaagaagtc catcatggac tagctttccc 420  
attccagaga tcttttcttt agagccatct ccaaagtca cataactagt ggagc 475

<210> 5506  
<211> 498  
<212> DNA  
<213> Glycine max

<400> 5506

agcttgaatc ggacatccgt gtgaaaagtt atgatcattt gaatttctca agagcttcca 60  
ttgttcaatt tcgagcatct cgatatatta taagcctaaa tcggacattc gtgtgaaaag 120  
ttatgaccat ttgaatttct caagagcttc cgttgttcaa tttcgagcct ctcgacatct 180  
tatatgcccg aatcgaacat ccgtgtgaaa agttatgacc atttgaattt ctcgagagct 240  
tccgatgttt aatttcgagc gtatcgatat attataagcc ttaatcgaac ctcaatgtaa 300  
aaagttatga ccattttaat ttcccgggag cctccgttgt tcattttcga gcgtctgtat 360  
atatgatgcg ccttaatcta acatccgtgt gaaaagttat gaccatttga atattctcaa 420  
gagcttccat tgttcaattg caagcctctt tacatattat gcgccggaat cgggacctcc 480  
gagtgaaaaa ttatgacc 498

<210> 5507  
<211> 565  
<212> DNA  
<213> Glycine max

<400> 5507

tgtaatatatt ataaatcact ttttttataa accttgatta attcaagtta aatcaattag 60  
gtagaaccaa ttaacttggg ttatgggtgt aattttgatt gcattgaccg tatgttttag 120  
tgtaacaatt tattccatac catgggactt aatattatgt attgggtacg tagtaaaaaat 180

tatatatata tgcaaattgt tgtattacat cttattaata gttactatgt tagtgataat 240  
 taacactaac aagtatttat ctttaaaaaa aaagtctaata taaatcacgc acagacagta 300  
 catgtacagt caagtcaagg tgcttttcaa attaacctgc caacttgaat tattttattta 360  
 tgatctagtt aaaagtaata tattttattta tgctgagaat aaaagattat ttaaaaaatg 420  
 agtagccgct actagtctag tcaaaatttt caagttattg ccacctgaat gcagtcaaac 480  
 atcatgatgt tacactcgac taattaataa gaaagagagt gataatgtca attagtaaaa 540  
 caattaacaa gggtgtttta aattc 565

<210> 5508  
 <211> 480  
 <212> DNA  
 <213> Glycine max

<400> 5508  
 agcttcgtgc cataggaatg gcttagtttc cggagtagct ggtagaatgg ctttgccttc 60  
 tctgcgagcc ttaaaaagaa cctagacaga ggcattagtc taccattcaa cttctgaact 120  
 tctctgacgt tagtaagact atgcatttct agtatcgttg cgcacttggc aggggttagct 180  
 tctatttcgc gatgggtaat gatgaagccc aaaaaatttt cgtggccaac cctaaagggtg 240  
 cattttttga gggttaagggt cttgacatac ttgttaatct ctatgaacac ctcttccaag 300  
 tctgccacat gttgtgctac actgtgagac ttaacgacca tgtcatccac atatacctcg 360  
 acattttgtc ctaagggcat gaccctataa cagacgtgag tgagttgaga atgaatactt 420  
 accgagattt ggagtacact gatgtagtga agatggactc cacaatcttc ccccttggat 480

<210> 5509  
 <211> 525  
 <212> DNA  
 <213> Glycine max

<400> 5509  
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 ctctctctct tctgtcaaata caaacatggg gttctagaaa ccagcacca agtcttgggt 120  
 tgaataacat ggtaaatttc cacgggacgc ccatgacaca gcctgctgca tcattctcatg 180  
 gtgcatcaat ccatcaactt ccaaataccc cgtgggtgtt caagggcatt gattctggta 240

actgttcgcc cgaggggggc cctgatctag gtctcgggtca gatttcgcag cctctcagta 300  
 gccaaacttca cgggtgagctg gacctgtccc aacaaggcag gagacattat atggatctag 360  
 aacagtccag ggcataatgaa tctgctcatt ggtcacttta atgcacttgt ttttggtttt 420  
 gtttttttgt cagggtttgta ataaaatgta gcacaaacct gtgcctactt gggttactgac 480  
 cagattgatg ataactatatt cttgttttgg tttgttcaaa ctgat 525

<210> 5510  
 <211> 539  
 <212> DNA  
 <213> Glycine max

<400> 5510

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 tcaagtaagt caagaatcta atttcgtcta ttaagaaaga gacctttatt agaaactgcc 120  
 atttcaattc ccataaagta gtttaagcgg ccaaggctct tgataggaaa acagatagca 180  
 aagcgtgttt gagttgagaa ataacatgat tactatttcc aacaataata aggtcatcat 240  
 cgtaaacgag aactaccact tgtttcattt aagacatcac aaacaaataa agaagaatct 300  
 gcattacttc ttaagaaatc acctcttgaa gaataatact taatttcaca tgccaagcac 360  
 attaagattg tttcaaacca taaattgatt tgtatagttg gcaaacgcag gaagaatttg 420  
 aacttttttg atgtcctggg ggtcattcca tatagacttc ttcttcaaga tccccgtgta 480  
 agaaagcatt tttacatcca tttgggtcat tgaccatcca taattaacaa caatatatg 539

<210> 5511  
 <211> 495  
 <212> DNA  
 <213> Glycine max

<400> 5511

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 tagatattgt cgcttgaatt tactacgagc atactgttgt caataacgag cgtctcgata 120  
 tactacgaga cacaatcgga cattcaagta aaaagttatt cctgtgtgaa tttgctacaa 180  
 gcttccattt tcaatttcaa gcgtctagtt atattacggg acacaatcgg acatccgagt 240  
 agaaagttat tgacgattga gtttgcttat agcatgtgtt gtcaattctg agcgtctcta 300



tatatgacgg gactcgatcc gacgtccgag ataaaagtta ttgtcgctag aatttgctcc 360  
agagcttcta ttttcaattt ctagcgcttc gaaatattag agcactcaat cggacatctt 420  
agttaaaaga tattgacggg ttaatttgct acgagctact attttccagt atgagcgatt 480  
tgatatatta cggga 495

<210> 5512  
<211> 502  
<212> DNA  
<213> Glycine max

<400> 5512

agcttgtagc aaattcaaac cgcaataact ttttactcgg atgtctgatt gtgtcccgtg 60  
gtatatagag acgctcgat ttgaaaacag aaactcgtag caaatacaaa cgacaataac 120  
tttttactcg gatgtccgat tgtgtcttgt agtatatcga gacgctcgta attgaaaaca 180  
gatgctcgta gcaaattcaa atgacaataa ctatttactc ggatgtctga ttgtgtcccg 240  
tattatatcg agacgctcgt aattgaaaac agaagggtgt tgcaaattca agcgacaata 300  
actttttact ccaatgttcg attgtgtccc gtagtgtatc gggacgctcg tacttgaaaa 360  
cagaggctcg tagcaaactc ctacgacaat aactttttac tcagatgtcc gattgagtgc 420  
tctaatatat cgagacactc gaaattgaaa acagaagctc tgagcaaaat ccaacggaca 480  
ttacttttat ctctgatggc cg 502

<210> 5513  
<211> 396  
<212> DNA  
<213> Glycine max

<400> 5513

aatatgtaca aattctaagg cagagagcac ttacatcaa gtccaacaaa ttttatgtaa 60  
gctacagttc actataattg cgccatactg cagcaaattc ttcacggaat gtgtttagac 120  
gagctttcaa gttaggtgtt ctaaagcttg catgcaggat ggtagctgaa aatagcaaga 180  
aaaattaact caaaagcaaa ttcatagttg ctaaaaatat ttaaaagatt aaaatttctc 240  
agtatgcaac gtaccaagaa gaccaatagc aagagcccat aaaactgtca ggagaccagc 300  
agaaacaaac caaagaaaga aacttgctgc agaaaaatgg ggaaagaatc actggaatca 360

<210> 5514  
<211> 407  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5514

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gagagtttgg gattaatacg tcgggccacc gtgagctgtc tatgagggtg caacttaatg 120  
aacacccaat cccctccgc aaaagacaca gcacgacgat gtttgtctac tgccttcttc 180  
atggattgtt gggcacggtg cagatgagct ttcaattggc gaatagcctc gtctctatcg 240  
aacaatacca aggctactaa atccacggat gtctcacctg tcaaaaaacg acgcacagat 300  
ggaggagctc gtccataaac gaccttgaag ggagtctttt cagtagccaa atagaaagac 360  
gtattgtacc attattcaac ccatgaaagc caaagatgcc atttatt 407

<210> 5515  
<211> 351  
<212> DNA  
<213> Glycine max

<400> 5515

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gtcataagtg ccatcgaacc caaggctttg aacgatcatc gcttcattct cgtggcaata 120  
gattatttca ccaaattgggt tgaagcggct tcctacacca atgtcatgag gagtgtagt 180  
gtcagattca taaagaggga gctgatttgt cggatggac tccctatgaa gatcattact 240  
aacaatggca ccaatctgaa taacaagatg acgtaggaaa tgtgtgcgga tttcaaaatc 300  
caacatcaca attccacgcc ctaccgacca aagatgaacg gagccatgga g 351

<210> 5516  
<211> 436  
<212> DNA  
<213> Glycine max

<400> 5516

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tttggtgaga tctctttcat ttacaaggca taacactcgc ttttagtagc acctatcatc 120  
 cttattccaa tggagagact ggggtgacca atcatatcct acaaagttaa aagctttcta 180  
 cgaaactcct tcaactactc caccttcatt aacgaccac gtcactgaaa ctattatgcc 240  
 tttggtgcct tctgccatcc tagagagcca catgcttcgt cttggccgtg gctacattga 300  
 tcaagtgttg attcaatggg aagggtttc acctacgaca gctacttgag aggacaagaa 360  
 ggctttttgc gacaactatc cttactttaa ccttgaggac aaggttggtg aaaaaggagg 420  
 gggattgat atgggt 436

<210> 5517  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<400> 5517  
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 gtcataactt ttcacccgga tgtccgatta tggcgaatca catatcgaga cgctcaaaat 120  
 tgaacaacgg aagctcttga gaaattctaa tggtcataac tttcaactcg gatgtccgat 180  
 tcaagcgcac cacatataga ggcgctcgaa aagtgacaac ggaagctctt gagaaattca 240  
 aatggtcata actttccaca ctgatgtccg attaaggatt ataatatatc aagacgctcg 300  
 acattaaaca tcgtaagctc tcgagaaatt caattggaca ttacttttca cacggatgtc 360  
 cgattcgggc gcttaatttg acgacacgct cgatattgaa caac 404

<210> 5518  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5518

gacactatga atctcagctt ggaaaccagc catcanatgc tatacgaaat tagattggaa 60  
 tagagtacaa tggcngcatg acggaccgtg cagaaccggg ttgtggagta aactcaatgt 120  
 cctcccttca aggtagaagt gatccagatg cctacctgga ctgggaaatg aagactgagc 180  
 acgtatttgc ctgcaatgac tacactgatg cgcagaaagt caagctagca gcagctgaat 240

tctccgacta tgcccttggt tgggtggcata aataccaaag agaaatgttg agagaggaac 300  
 ggcgagaggt agatacatgg actgagatga aaaggggtgat gagaaacaag tatgtgcccc 360  
 ctagctataa cagaaccatg cgacagaaac tcctatggct gtcccaaggg aatttaaccg 420  
 tggaagaata ttataaagag atggaaatgg cg 452

<210> 5519  
 <211> 208  
 <212> DNA  
 <213> Glycine max

<400> 5519

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 caacagaatg gagaaggagg aaaggtgatt ggaaacgccca cttcaaggag aagatgagtc 120  
 aagaacaagc tcaccatcat aggaagtcatt ggataagagt ttgaaggtag gagaaaatga 180  
 gtggatggaa agagagaggc gggggggtt 208

<210> 5520  
 <211> 428  
 <212> DNA  
 <213> Glycine max

<400> 5520

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 gagtatattg tttctctaaa atatgggtgct ctcgtgaatg atttattttt ccttgctaaa 120  
 gcatgttcgc ctttttaggt gaaaaaacca ggtggaccat tcggtcctgc caacaaatct 180  
 tatccggagt cccatgaatt gattgtcatt catgcgacct ccaccatcaa gtctggagcc 240  
 ccacgaattg attgcctagc gctgttcgtc tatectccac cctcaaactt tattcggaga 300  
 cccatgaatt gattgtcatt catgcaccct ccaccatcga gtctggagcc ccatgaattg 360  
 attgcctagc gatgttcgtc tatectccac cctcaaactt tattcggagc cccatgacat 420  
 gattgtca 428

<210> 5521  
 <211> 428  
 <212> DNA  
 <213> Glycine max

<400> 5521

agcttgtagg gttaaagtct cattattgtt atgtgtcat gcaacaattg ttagccgtgg 60  
ctatacgaga catcttgcca aacaaagtca ggtaacgat aactcaccta tgctttttct 120  
tccattctat atgtagcaaa gtcattgatc cagtcattt tgatgagttg gaaaatgagg 180  
ccgcaattat actgtgccag ttggagatgt atttccccct tgctttcttt gacatcatga 240  
ttcacttgat tgttcatctg gtcagagaag cagaagaagc cattgaattt tgttcagaat 300  
acttagagaa ggctaaacct gttgggcttc ctgagtctcg gcatgatgac agagtgggtg 360  
gtaaggggtc aagaggactg caggtgatca ctccaagtgt agaagaattg tacaagctca 420  
cttgtatg 428

<210> 5522

<211> 402

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5522

aagtctcacg attgtcacgt gttgatgcaa catattgtta gccatgtgtt ttgcgagaca 60  
tcttgccaaa caaagtcagg ttagccataa ctcacctgtg ctttntcttc catgccatat 120  
gtagcaaagt cgttgatcct gtcaagtttg atgagctgga aaataaggcc acaattatac 180  
tgtgccagtt ggagatatat attccccctg ctttctttga catcatgact cacttgattg 240  
tgcattctgtt caaagaaatc gaatgttgtg gtcttggtta tctgcggtgg atgtaccggt 300  
ttgagtgata catgaagatc ttaaaagggt atacaaagaa tctatatcgt ctagaagcat 360  
ctattgttga gaggtacatt gcagaaaagc cattgaattt tg 402

<210> 5523

<211> 397

<212> DNA

<213> Glycine max

<400> 5523

agcttgaata tcttcatttg agtattgcaa ttctatccaa agcatttcat tggctacaca 60  
ctctccaatc tcttcttctt ttgacccgcc tatatttgte aaactgcaca ctccctcact 120  
ataatgaacc atccttgctc aacttctcat ctctgcaaac tctccatctt tccgttacta 180

gttattcccc tgccatttct tttgtcccca agtggatatt caaattgaag aaacttgttt 240  
 ctcttcaatt accgggtaat gaaatccaag gtccgattcc tgggtggtatt cgaaacctca 300  
 cacttcttca aaatcttgac ttgtctgaaa attcattctc atcttctata cctgattgct 360  
 tatacggctc tcacgtctc aagtctttgg acctaag 397

<210> 5524  
 <211> 332  
 <212> DNA  
 <213> Glycine max

<400> 5524  
 ggacctatag aatctaagct tcgttttaac tacgagcatt tatatatagg ggggttattg 60  
 acatccgagt aaaaagttat tgcgttaga atttgctcag accttccgct ttcaatttca 120  
 agcgtctcga tactttacgg aattcattcg gacatccgag ttaaaagata ttgtggtttg 180  
 catttgcttt gagcttccat tttcaatttc aagtgtctcg atttattaca ggactcaatc 240  
 agacatttga gtttaaagtt aatgtcgtcg aattttttac gagttttccg ttttaattaca 300  
 tgcattctga tatataactg gactcattgg ga 332

<210> 5525  
 <211> 426  
 <212> DNA  
 <213> Glycine max

<400> 5525  
 agcttgtagc aaattcaaataa attaataact ttttactcgg atgtccgatt gtgtctcgta 60  
 gtatatcgag acgctcgta ttgaaaacag atgtctcttag acaattcata cgacaataaa 120  
 tttttactca aatgttcgat tgtgtcttgt aatatatcga gacgctcaaa attgaaaacg 180  
 aaagctcgta gcaaaatgca accacattaa cttttaactc ggatttccga ttaagtcccc 240  
 taatatatcg tgacgctcga aattgaaaac ataagctctt agaaaatttt aacgacgata 300  
 actttttact cggatgtccg attggaaccc gtaatatatc gagactcttc aaattgaaaa 360  
 cagaagctcc tatcaaattc aaactacaat aactttttac tccgatgtcc gattgtgttc 420  
 cgaagt 426

<210> 5526  
 <211> 419  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5526

agctaccatt gatcaatttc gagcgtcttg ttatgttatg cgcctgaatc agaactccga 60  
 gtgaaaagtt atgaccattt gaattgctca agagcttaca gtgggtcaatt actagcgagt 120  
 agatatatta tgcgccagaa tcggacctcc tagtgaaaag ttatgacctt ttgaatttct 180  
 tgagagcttt cgttggtcaa tttcgagcgt ttcgatatat tatgcgcctg aatcggatct 240  
 ccgagtgaag agctatgacc atttgaattt ctcgagagct tctgttggtc aatttcgagc 300  
 gtctggatat aatatgcgaa tgaatcggat ctctgagtga aaagatatga ccatntgaat 360  
 ttctcgagaa gcttcgttgc tgaattttaa gcgtcttgat ataatatgcg cctgaatca 419

<210> 5527  
 <211> 461  
 <212> DNA  
 <213> Glycine max

<400> 5527

tctgagtcac ctgcggcatg caagcttcaa gaaaaagatg gcctcagcaa atttcttatt 60  
 tccagaaggg aattctatca atagacctcc aatctttaat ggagagggtt accactactg 120  
 gaaaacccaa atgtaaattt ttattgaggc aatagatcta aatatctggg aagccataga 180  
 aatagggcct tatataccca ccacagtaaa aagagttaca atagatggta gatcatcaag 240  
 tgaaagcata actatagaaa aacctagaga cagatgggtc gaagaggata gaaaacgagt 300  
 acaatacaac ttaaaagcca aaaacataat aacatctgcc ctgtgaatgg atgaatattt 360  
 caggggttca aattgtaaga gtgctaagga aatgtgggac actcttcgat taacacatga 420  
 aggaactaca gatgttaaaa gatctaggat aaatgcacta a 461

<210> 5528  
 <211> 373  
 <212> DNA  
 <213> Glycine max

<400> 5528

agcttgcctt gcccttgat atacttgtgg ttacttatgg ccactatgaa tgacaaaatc 60  
 cttgggataa aggtagtgtt gtcatgtttt caaagaccgt actaaggcat acaaattcctt 120  
 atcataagat gaatagataa aggcaggacc acttaacttt tcactaatat aaccaaattg 180  
 gatggccgtt ttgcaacaac acaaccctca tcccaacatt ggaagcatca cactcatatt 240  
 tcaaagattt gggaaagttt ggcaacgcaa cgtatggggg cattagttag catttgctta 300  
 agaacattga aagctccttc ttggatctct tcccatgtga aaccaacatt tttcttgagc 360  
 acttcattga gag 373

<210> 5529  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<400> 5529  
 agcttctcac gcccttgaca ttcatgggat gtatgaagtt tctcaatcac atcaatcttt 60  
 gccttgtcca cctctatttc ccttattgaa atcttatgcc ccaacactat tccttcttga 120  
 accatgaaat ggcatctcac ccaattgaga actagattgg actcttcaca tcaactgtaat 180  
 actctttcaa gattggataa gcacccttca aaagatggcc caaaaatagg gaaatcgtcc 240  
 atgaaaactt caatgcattt ttccaccata taaaaaaaaa tagccatcat acatctctga 300  
 aatgtagcta gggcattgca cagaccaaaa ggcatgccc gatatgcaaa tacaccaaaa 360  
 aggcaggtga aagcagtctt ctcttgatct ttgggatcta caacaatcta attatagcca 420  
 gaatatcca 429

<210> 5530  
 <211> 422  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5530  
 ggttctatat ccatagaagt tgggcgcaat agcttgctgc taacatgtat nttgcttcag 60  
 tagtggataa tacagttgat ccctgcttct tgcatatcca tgtgactaag tttccttcta 120  
 tcaaaaggca acttccactt gtactttttc tttctacttt atcactaaca tagtccgcat 180  
 cacaatagct tatgagcctg aaactttccc ttcttttgaa caaatgacca agggtaggag 240



ttccaattaa atatctaaat atacatgtaa ctgcaattaa atgaacttcc cttgggttcct 300  
 cttagaatat agcacataag caaactntga acgttatatc atgcctaaac gtagtaagat 360  
 actgtagtga gccgatcatt gctctgtact gggccccgtc caccttcgtt gattcctcgt 420  
 tc 422

<210> 5531  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<400> 5531

gcgctcgaga aacattaata gaattatatt tgtctatatt tcaagtacac atttaacatt 60  
 tttttctcta aaattaaact taatgggctt ctagagcaaa agagagtttt tcaacttcaa 120  
 ccaaataaag aaacttcaaa gcattgttct ttgtttgtgg taactttaat taciaaagcat 180  
 acacatatat aattaatttt caattaagaa aaatcaaatt acctcttcaa acaatgtaac 240  
 ataaaagata aaacaaacca caaaaaataa tcatgaaagg aagagataaa tttatttcca 300  
 accacacata tcaaattatc atttaatgaa tgtgaaatta caaaactacc cctaatacaa 360  
 aaactagtct aggtgcccta aaatacaagg gctgaaaaat cctacatttc taggggtacct 420  
 tacctatatt atggatccct a 441

<210> 5532  
 <211> 428  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5532

agctngaagg taaactagat gtcttgggta acttgggctta ttaactggcc atgaatcaaa 60  
 aatctgcacc tgtcaccaga ctctgtgggt tatgctcttc tgccgaccac cacacagacc 120  
 tttgcccttc tgtgcaacaa tctgaagcaa ttgaacaacc tgaagcttat gttgcaaaca 180  
 tctacaatag acctcttcaa cctcagcagc agaatcaacc acaacagaac aattatgacc 240  
 tctccagcaa caggtacaat cccgggtgga ggaatcatcc caaccttaga tggctgaatc 300  
 cttcacaaca gcagcaacaa caaaaacagc cttattttca gaatgctgct ggcccaagca 360

aaccatacgt tcttccacca atccagcagc aacaacaaca acaacaatag ccccggaac 420  
atcaaaca 428

<210> 5533  
<211> 434  
<212> DNA  
<213> Glycine max

<400> 5533

agcttgagct cggctggagt tgaatacgtt tagcttgagt tgacataggg cttttttaag 60  
gctctgctcg acttacataa aagtctgact tacgagccta tttaaaagct tgcttaaaga 120  
cgtcttttat taattaatta ttttaaaacc tagtgaaata ctaactaaaa aaagaaactt 180  
ataaaatttc gtataaataa tgtacaaatc taaaaataat tgataaacia aatttatattg 240  
aattcaagtc gttaaagcac aaagtatata aaaaaataa aaatagcata atattaaaaa 300  
atgtatggat tagagatgat ttacactaat atagccaaac aaaaattatt attagttaaa 360  
ttaacaattt ttaatccaat ttttttaata tataactata ttatatagtt ttaaaaaaaaa 420  
tatatccaca ataa 434

<210> 5534  
<211> 451  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5534

ctagcttctt aaggaagttt tctcaaagta agcttctcaa ggtagttttc ttaagaaagc 60  
ttctcaagga agttacctag tctataaata aaagcatgtg taacacttgt tataactttg 120  
atgaatgaga gtcttgtaag acacaactca cagttcaact tctctccctt tgtcttcctt 180  
caatttcgtg ctccctcctc tctttctttt agcaaagct cccccccc tctaaaattt 240  
aattggattg ggcttctccc aattcaatta aatttatatt caaccacaca catcaaatat 300  
tcacttaatg catgccaaat tagaaaacta ccctaatac aaaagactag tctatgtgcc 360  
ctaaaataca agagatgana aatcttacat ctctagggtta ccttaactat attgtggagc 420  
ccaaatacaa tgcccaaaat aatgaaacct t 451

<210> 5535  
 <211> 257  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5535

agcttctgtt atcaattgtg agcgtctntn atattattgg actaaatcgg acatccgagt 60  
 aaaaagttat tgccgttcga atttgcaacg agtttgtttt ttcaatttgg agcatctttt 120  
 tatattacgg gactcaatag gacatccgag tataaagtta ttgttgtttg aatttgctca 180  
 gagctatgga acttactttc cagtgtctcc atatattacc gaatttaatc aaacattcna 240  
 ctataaaacc attgccc 257

<210> 5536  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<400> 5536

agcttgaagg catgtaaccc accatcttct cttagtatat cataggtaac gtgcccatta 60  
 tcattgttat catttccctt tccatcattg tgggtgctac ttgagctgcc agatccctct 120  
 acctttgggc gtattctttg aaagattcat gtgccctctt acacatggtc tgaaactgca 180  
 ttcttttcgg agccatatct gaatagtgtc gatattgcct aacaaaggca gccattaggt 240  
 ccttccacga atggactcgg gaaggttcca gattactata ctaggtgatg gctgccccag 300  
 ctagactatc ctggaagaaa tgcatagaaa agtggtgatc tttttcgtat gccttcattt 360  
 tcctgtagta catcttcaag tgattcttgg cgcaagtagt ccctttgtac ttattgaaat 420  
 ctggcacctt gaactt 436

<210> 5537  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<400> 5537

tatcgattt gtaatctcca tctgattcaa cctatccatg ttaggaaagc aggggtggaa 60  
 cttgattaat aaccacata ctacaatgta taaaattctc aaaaataaat attatccaga 120

tgctcgattc tatgatgcaa aactagggca tgaaccaagc tatacgtcgt atagcatttt 180  
 tgcttcacat atattggtcg aggaaagcat atagtgc aaaagtgatg gtagctctat 240  
 aaacgtttgg actcaacctt gggttcgagc atcaacaagc ccatatatca cgtgatcaac 300  
 cctgctcgat cttgatgatc tcatagtcag ttcactcatc gacaaccaac aacgatgttg 360  
 gcgtcaagat gtgctacaac aatatttcaa tgacaacg 398

<210> 5538  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<400> 5538

agcttatcac ccttaccggc gattgttata atcttttaaat ggaagtcaag ggcattgatag 60  
 tgcaccgata tcgttaactg gtcaacaggc tcttgagcga gttgaggga tcaatgttgt 120  
 atttggaaag acccaaaaag gaaaaaagta aaacttctat atagaagaaa aggtcgatat 180  
 tgtttgatct tccatattgg tccgatctag atgtcagaca ttgtatttat gttatgcatg 240  
 tcgagaaaaa tgtttgtgat agtgtcatcg acacacttgt taacattcaa ggaaagacaa 300  
 aggatggttt gaatactcac caagatctag ttgagatagg tatatgagac caattacatt 360  
 caaggtatga tggtaacaaa atatacttgc ctccaacttg tcatactttg t 411

<210> 5539  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5539

ctagctactn tctctgtntg ttggatgaaa ggcactgcta cttctaaact ctggttaatc 60  
 tataatattt acatgtctta tgttaatatt ggataacat gggttgtag aattgtgaac 120  
 tgactaatac gtggcatatt atctgacttt gggcatccat atctgtactt atataatata 180  
 gatctctttg ctcatataaa aacaaaatac taatctatta aatttttctg catattcgaa 240  
 taataaatc aattttttca tttttcacia actaatttat tagtgtctca tatttccagg 300  
 aagtaaaata aagatttatc ttatgagcaa atatttgatt ttagtaaaat tagtaagatt 360  
 taaattttaa ttctattgca tctgcacggt ataattatta ctactcttct actaatttta 420

ccaccataag tttttgttta

440

<210> 5540  
<211> 410  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5540

cttgcaagct ggaatcattt atcctatctt cacagccaat tgtgagtccc atccaggtag 60  
tttcaaagaa aaccggcctc accgtgataa aaatatgaga aggaggagct aattcctact 120  
cgagtgcaga acagttggag agtatgcac gactatagga ggctgaacca ggttaccaaa 180  
aatgaccatt gtgcactgtc attcattgac caaatgcttg aacacctggc agataaatct 240  
cactattgcn tccatgatgg gttttctggt tatatgcaa tctactattgc ttctgaggat 300  
caggaaaaga ccacattcac cgcccccttc ggcgctattg cctataagat gatgcctttc 360  
ggcctgtgta atgtccctgg ttccttccag cgatgcatga tgagtatttt 410

<210> 5541  
<211> 415  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5541

ntgatatata caattgcact attcataaaa tatgagccat gttcagcaat ctcaaccttg 60  
gtgaatattt agcctcgtgg aagataaata acaaaccac ctcaagtctc tgtgttaagg 120  
gtcctgtcac atctatcatg agcaacattc aacaagtcca agcaaagttt gcacttgta 180  
gtttcgacta tcatagtcaa gatattaact gcactttctg tagtgtgaac cttccatagc 240  
aaaacctggc tagatgtgag taactccctg atcttgtgaa acatcacatc aatatgattg 300  
gttctcgaat gatacaactg agtctttgta gatcaatagt attctatcta ttgcaatgca 360  
actgaacaac aactggctca atgcccact cattcactaa ccttttctaa ccaca 415

<210> 5542  
<211> 248  
<212> DNA  
<213> Glycine max

<400> 5542

tctggcttca attattcagt gggctctcct tccgtgtcca ccatgttgcg atgtacccag 60  
cctgtgagga ccgctttaca ggttctgcta tccagggatt cgaggaatgc caccatactc 120  
gctttccaat attcacagat gcttccatcg agaagagcgg gtctgctcac tggaccgact 180  
tctatctcca ggctcagcag agattgactc cctatatatc actctgggaa tccgagtggc 240  
ggctctga 248

<210> 5543

<211> 299

<212> DNA

<213> Glycine max

<400> 5543

tccgttggtc aatttcgagc gtctcgatat atgatatccc ttaatctgtc ttctgtgtga 60  
aaagtttgaa ccattcgaat ttctggacag cttccgttgt tcaatttcga gcgtctcgat 120  
gtattatgta ccaaaatcgg acatttgtgt gaaaagttat gaccattcaa atatgttgag 180  
agcttccatt gttcaatttc gagcgtctag atgagttatg tccgcgaatc ggacatccta 240  
tgaaaaggta tgaccattcc aatttctcga gaaccttctt tgggtcaattt cgaacctct 299

<210> 5544

<211> 460

<212> DNA

<213> Glycine max

<400> 5544

gagcttggag tttccaagtg ccaattcgtc ttcttcttta gtccagtctt cttctggctt 60  
caattcttca gtgggctttc cttctgtgtc cagcatcttg ggatgttccc agcctttgat 120  
gacagctttc caggttctgc tatccagtga tttgaggaag gccaccattc ttgctttcca 180  
atattcatag ttgcttccat cgagaattgg tggctgttcc actgggtccgc cttctttctc 240  
catgttcacg agaatttatc tccctagatc tcaactctgtg atttcgagtg ttggctctga 300  
taccaattga aattctgata ccaggggaca gatgtcgtac aggatgtcac gacatcacgc 360  
ttcagaacat gcagattata tgtgtccgta tgaacagatt aaacaagtaa ataacacaag 420  
agaattgttt acccagttcg gtgctacctc acctacatct 460

<210> 5545  
 <211> 446  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5545

tctatggaaa atgtgaaagt tctcaaagct atccttagaa cttttgaagt ggtttctggt 60  
 ttaaaaataa attttgccaa aagctctttt ggtggctttg gtagggatga ccagtggagg 120  
 caaatggcag ctacctatct taattgcagt cagttagctc tccctttttt tttatcttgg 180  
 tataccatt ggggccaacc cgaggcaagc tcatgtgtgg gaacctatta tccaaaaata 240  
 tgagaggaga taagctaggt ggaagaagag atatatctct tttgggggga gtgtggttcc 300  
 tatccaatca gtccttactt ctcttctat ntattatttn tctttnttca gggttccccg 360  
 tatggtggct aacaaattaa tcagaattca gagaagctnt ctttggggag gaggtcatga 420  
 caacaacaag aatgcttga tatcat 446

<210> 5546  
 <211> 453  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5546

agcttgtaag accacagtaa gagtagtggt gtatcagtgg agaacatcca accccttatt 60  
 gtagccccac tgtatgaatt attgcatgaa taagaacgaa acttatagt agatttaagg 120  
 ctttcaaaat atgaattact atatatgaaa agaagttaaa atatctttgt attcaataac 180  
 aatttgattg tttgaaaatt gatgactgca ataccatgca tgactacgga ataatttctc 240  
 caaaataaga aataaaataa ctaaaaaaaaa ggctgaaaag gtcttcatta aaggctntgc 300  
 acaatgcaca ttaattaatg aaataataat agaatacggg aagagtgagg actctacctg 360  
 gaggattggt aagggtattta gaggaccact tgatacagga cttctacttt ggcacanata 420  
 ctttatcccc ctcaagagaa accagtgtgg agt 453

<210> 5547  
 <211> 463

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5547

agcttgagct tagctacaca tacctctcta atagctaagc tcacctcctt gagatgagaa 60  
gctagagctt agctacacac cccctataat agctaagctc acccccatga caaaaaacat 120  
gaaaatacaa aaaaaagtcc ttactacaaa gactactcaa aatgccccga aatacaaggc 180  
taaaacccta tactactaga atggccaaaa tacaaggccc agacgaagga aatacctatt 240  
ctaataattta caaagataag tgggctcata cttagcccat gggcttgaaa tctaccctaa 300  
ggctcatgag aaccctaggg tcttcccttg gatctctagc caatctactt ggagtcttct 360  
accaatgcc cttgcggggg aggatngcat caganagggc acccttcaaa gacggtcctc 420  
caaccgatgt cgttattcaa cgacactggt gtaccaccac acg 463

<210> 5548  
<211> 465  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5548

agcttgtacc cactacaggg cagtagatta tgtttgcttc acttgatttg taatgctggt 60  
gtacggccag tttatgtttt aactattaac agcattaaca gcttcacttg atatttaaca 120  
gtttcacttg ataaaattta aatatttaat ttttaactaa tgttttgcta ctcgtgtaaa 180  
ccttgcaagt atcctaactt gcactttgtg gagtctcctg catcggctcc accagaagtt 240  
taaattgatt ttgctgcaca acaacagtaa gctatcttcc ttgacctaaa ttaattcttt 300  
ctatagtagg ataaaaacat agattgtaga aattcatagt tgcatttgaa gataaaaagt 360  
aaacataaat ccttcttcac aaacataaac ccttctttag tatattcata aatcatnata 420  
taacaaattt gatttctcat tttttaaaaa gaaattattt ctaca 465

<210> 5549  
<211> 463  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations



<400> 5549

agcttctggt gggacatctt gacttgcttt ccaatctgac attcaccaca aattctgcct 60  
tcttctatctt tcagattggg aatgcctcta acagcacctt tgtcaatgat tttcttcatg 120  
cctcttaagt gcagatgtcc aaatctttga tgccatattc tgacttcac tttcttggag 180  
gatagacatg tggaggagta actggtttct tgagggtgcc ataggtaaca gttgtccttt 240  
gatctgctgc ccttcattag aacttcactc ttctcatttg tcaccaagca ttctgacttt 300  
gtgaagttta cattgaatcc ttcacacac agctgactga tgctgatcaa gtttgagtc 360  
agtccttca ccagcagtac tttgtccagt ctaggaagtc catcatgaac tagctttccc 420  
attccagtga tctttccttt agaaccatct ncanatgtca cat 463

<210> 5550

<211> 436

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5550

ggatattaat gatataagg gacaattggt tgatattgga tctaacaaga agggtaaaat 60  
taagaagtgc aaaaaagatt attagttata aattctacaa aattttatac gtcatttgga 120  
tgttattatt tagatttagt cttatatgcc taatttatct cctggagcta tttctttttt 180  
tttttttagag ttctacaaca cattttattct ctatttactt catacactaa acaatggaaa 240  
tttttgcaag ataatgtatg aaaattttct attaaatcat tatctcanac ttgatgggag 300  
agtagaattg aaagtgtcaa accaatataa ctttaagcac catagataag agatgtttgc 360  
ttcattatca aatatagtga agatcctaata anaaagtga gcctatgtta acaactatag 420  
aataaaattt gaattt 436

<210> 5551

<211> 413

<212> DNA

<213> Glycine max

<400> 5551

tcctacaatt ggacaatagt ggtgagcctt tcaacatcac ttcccaagta gtgtttgatt 60  
ctgctgccat tcacagtctc tgtcctcttt gtggctggat cttcaatac cacaactcca 120

tgtggaatga cttcatttaa gatgaatgat ctggaccact tagatttttag cttccctgga 180  
aacaatctca atctagaatt aaataacaaa acctgttgtc caagcagaaa ttttttatca 240  
aaagcttttt atcatgacaa actttaactc tttgcatata aagcttgga ttctcataat 300  
cttgaaacct taattcctcc aattcatgaa gttggagctt cctatgttca ccagctctgt 360  
ttagataaaa attcaaaaac ttcgatgccg agtaggttgt gtgctccaac aca 413

<210> 5552  
<211> 465  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5552

agcttagacc gctgaaggaa ctttcttatt tattgggaaa acagtaaact taatcaactc 60  
cgtatacgaa tagaaacaaa agagagacaa aacagtcaat gttgagttga gccatcgaca 120  
actctcgtgc aagcacaagg aggagtagcc cgatgcttgt gagtgacacg gataagtga 180  
cttattattt ataaaataat agagaaaaat aaaaagttcg gcgaatagac cgatttgaat 240  
cgaacactca acaccggcgt ggcgtttccg tatgtttttg atcaatagaa caggaagagg 300  
aggaaaaaaa agcttatgat gagcatctat ttgagtcgat catttccaag atctaattcc 360  
agtttattct tatgtagtgg aaaggcctta caatctgaag ttntacgctt aggggaagaa 420  
atgttcttgg tggatgcagg acctgngacc cccagaattt gtatg 465

<210> 5553  
<211> 432  
<212> DNA  
<213> Glycine max

<400> 5553

ctttcttaga catattttaga tggctgcaaa caatttatta tgtctcaaca tatgctaaat 60  
tcatgaagga tttgcttaca aacaatagaa taattatgga tgatgaaaca ttggagctag 120  
aggcagggttg tagtgcaatt attcataaat ccattctata gaaatctcga gatcctagta 180  
gtttcacaat tcctgtgact attagaagat tattaatagg aaaggcagtt ctttattttag 240  
gtgcaagtat caacctaatg cccttggtcca tgatcaagcg gataggagaa gtagacatta 300

taccaacaag gatgactctg cagtttgcta acagaactat caagcattct tatggcatta 360  
 ttgaagatgt attggtaaaa gttgaccaa ttctctttct agtcaactct atgggtgatgg 420  
 atatgaagac aa 432

<210> 5554  
 <211> 447  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5554

agcttggttac taaggaagaa gtttatatgt tgtttcctct atgaaatcgt ataaggcacc 60  
 tgaacctgat gggattaga aaatattttt taagatattt tgggaaaagg ttggagatga 120  
 tgtttgagaga tttgtagag aagcgattca gaaggatgt ttgatgtgta ggctgctaag 180  
 actattattg tcctaattcc taaaggatgt tctcaaaaaa catttagagt gtgtttggat 240  
 agagaatttt aacaaaggaa agtaatttat cagagaatct aaatttttct aatctagaat 300  
 tcattgtttg gatgtttttt ttatgaagaa tttaaattnt tggaatttta aaacggaatt 360  
 tcaaacaact aanaatgtga aatttcaatt ctcttctaaa aagtgaagaa ttaagattat 420  
 cttcttatag aagaatcttc taaaatg 447

<210> 5555  
 <211> 465  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5555

agcttaccac ccagcttttg aggttatgct ttgtctcatg ctgcatact gatcaactgc 60  
 ataccactc cctttttgca taacatatcg ccttatgaga aacttcatgg acaccacgt 120  
 gacatatcta atcttcgcgt gtttggtgctgc ttgtgttata tcaacactct taaagcacat 180  
 tgtcaaaagc tcgatcccag agcgcatcca tgcacttca ttgggtttta aacgcatact 240  
 aagggatatt tagtctacga ttttcattcg catagcatca attgttcacg aaacgtcgta 300  
 ttttatgaga atcatttccc acatttccct gaaacatcat ctttgaaatc cacttttact 360  
 attccaactc cggagtcatt ctccagcgac caatatgaac caccagttga tattatcatt 420

actatacgca gaaccananaa cggctctact caagatgagc cttct

465

<210> 5556  
<211> 466  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5556

agcttaaggg aagagaggaa tgcattcttg atttatacta ttcgggtcac ttcctgtgcc 60  
tacgtccagt ccttaagcaa cccacttgag attttccact ctctttgtaa aactcctttt 120  
acaaagtctg aaccacacag ggacaaccct tcccttgtgt tcaggaatcc tctacaacaa 180  
gagacccatg gtctcttaat cccttttcag aaataagaag aagagaagaa gaaatctctc 240  
ttaaaagaga tagattgtac aatgaagatc aatcaaaaat tccttattga atatgcaagt 300  
ggttgaccaa ggaatctttt tgagaggata agacatttta gttcagaana actcttaatc 360  
tttgagaggg ataaaacttt ttgggcaata aaaactctct ttaaattcga gtttccgagt 420  
cacatataaa tagacccttg atggccattc ataaaccatt tgaata 466

<210> 5557  
<211> 484  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5557

gacactataa atctaagctt aacaagttag taagttttct acttataatt ctagatatat 60  
tatgtttata tatatgatgt tataattgtg catgatctgt caaagaaaat atgatgtttc 120  
tacttgcatt atgtgttata atatatgatg tttatatata tttcgaattt tgttggttaat 180  
aaaactgttt aattagaaac tgtataattt ttttgtttaa taaaactgtt taatttttgca 240  
tgatctgttt aataaaactg tttataaaac tgtttatata taatatatga tgttaacatt 300  
nttaaaactg tttataaaac agtttagtta gaaaaaatgt taaaactaga gaaaaaaaat 360  
gtataataaa actgtttatat ttaaaactgt ttcattagag taaaacattt tttctttgtt 420  
tttatttcga aatttaatac atatgttata tagaatgata tatgttgatg atgatgttgg 480  
atgt 484

<210> 5558  
 <211> 470  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5558

agcttataac atattttaaga cacactaaga tgaatgttaa gaatatattt gaggtcaaatt 60  
 tagtcaattg cttaggcatg agtatatttat tgcccagaaa atttagagaa gattaattag 120  
 taatatatag tcaggaatat aaattaaaat gttacaacta tcttcactac cttaacttca 180  
 agagcaccag ctaggcctta ctatattcaa aagaaaaggt taaaactgtg aaaggcaatc 240  
 taatcacaaa ctaacctgtc tgatgacatc attaagacca gggcagagcc ctccacaagt 300  
 aacaattgct gcctttactt cttctggctt aaagtatatc ttttcacgag gccagctcg 360  
 atgaacccta aaaggatttc agaactactt agcatatatg ttaatatattag gaaacagcat 420  
 tctatacaac acaaagatgt actanaaata ttgaaaccat aaactagaag 470

<210> 5559  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5559

agcttctaaa ctntatacaa gaatgaagct ctgataccac ttgttggaca agtggcctca 60  
 gatattcttaa gaaggggggag gggggggttga attaaaatat tacaaattat ttccccaatt 120  
 aaaaattcta tttaactttc tattcaagtt acaaattccc ttaataatga atttcttaaa 180  
 taatgattca aatagaacaa tttgaatatg aatataaaac aataataaat aaatgagttt 240  
 aagggaagag aaaatgcaaa ctcatattta tactggttcg gccacaccct tgagcctacg 300  
 tccagtccac aagcaacccg cttgtgagtg ccactatcta gtaaantncc ttacaagtt 360  
 ctaaacacac aaggacaatc ctt 383

<210> 5560  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5560

agctttggca aattcaaacg accattactt ttgactcgaa tgtatgatcg atgccgatta 60  
tatatcgaga cactcaaaat tgaaaaacag aagctcacga gaaattcaaa tgggtataac 120  
ttttcactcg gatgtctgat tcacgcgcgt aatatatcga gaccctcgaa attgaacagg 180  
gaagctctcg gcaaattcaa acgaccataa catttgactc gaatgtatca tcgacgcccc 240  
cgatatttcg agacgctcaa aattgaaaaa cggaagctct tgagaaattc aaatggctat 300  
aacttttcac tcgaatgtcc gattcacacg cataagatat cgagaccctt gaaattgagc 360  
atggaagctc ttggcaaatt caaacgaata taacttntga ctcgaatgta tgatcgatgc 420  
cgattatata tcgngacgct c 441

<210> 5561  
<211> 429  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5561

cttcaacatt caatttgagc gtctcgtaat attactggac tctttcagac atccgagtaa 60  
aaattttattg tcgtttggat tggctcaaag attcaacatt caatttcgag cgtctcaata 120  
tattacggga ctcatcaga catccgagta aaaagttatt gtcgtgtgaa ttagcttaga 180  
gcttcaacaa tcaatttcga gcgtctcgtt atatcacggg actcaatcag acatccgagt 240  
aaaaagttat tgctgtttga attggctcag agcttccaca ttcaatttcg agcgtctcaa 300  
tatattacgg gcctcaatca gacatccgag taaaaagata ttgtcgtttg aattggctta 360  
gagcttcaac attcaatttc gagcgtctcg atttgtgacn agagtcaatc agacatccga 420  
gtaaaaagt 429

<210> 5562  
<211> 440  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5562

agctntgagc caattcaaac aacaataact ttttactctg atgtctgatt gagtcccgtc 60

atatatcgag acgctcgaaa ttgaatggtg aagatctgag ccaattcagg cgacaatatc 120  
 tttttactcg gatgtctgat tgagtccttt aatataacga gacgctcgaa attgaatggt 180  
 gaacctctga gcaaattcaa acgacaataa ctttttactc ggatgtctga ttgagtcccg 240  
 taatatatcg agacgctcga aattgaatgt tgaatctctg agccaatcca aacgacaata 300  
 aatttttact cggatgtctg attgagtccc gcaatattac gagacgctca aaattgaatg 360  
 ttgaagctct gagccaattc atacgacaat atacttttac tcggatgtct gattgagtcc 420  
 cgtcatatat cgagacgctc 440

<210> 5563  
 <211> 331  
 <212> DNA  
 <213> Glycine max

<400> 5563  
 ggtgatcgat tacacagtaa gggaattttc aaaataactc ttatgagtta caactgttca 60  
 ggaagttttt gaatggccat cataggcctt taaagacttt ggatacgaaa ttccttagag 120  
 gttttctgaa taacattttc ttatcctctc aaaaccaaatt tgtcttatca ttctcaaaat 180  
 attccttggg caaaacactt gcaaattcaa taaggaatct tgatcgatct tcaattgcaa 240  
 tatecttctc ttaaagagag aaaattcttc ttcttcttat tcaaacagat ctgtttaaga 300  
 gaccgagagt ctctcatat gtaacgatat t 331

<210> 5564  
 <211> 463  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5564

agcttttcaa tttctatcca aacaatacca tattgtaatt aaaaaaaaaac ataagaaatt 60  
 agttacatga tattctcaat tcccaactac ttccgttgat atgatttttt tttttaatat 120  
 gatatatcta attgaagcct aacatttcaa aattaaaata tatcaccaca gttaacaaat 180  
 ttgttattaa ttntaatttc atgtcattaa attaagatat gatctcatat tngatcataa 240  
 acccagttag attgatattt ttttccagta tgatgtaccg gattgcaagt tataaaatta 300

aagtaacatt ccggttaaata tattgatttt atatgtatta ttatttggag ggatttcata 360  
 tttatntaat aattcaaggt tataacaata ataaatttta tccancatca ttcaactgat 420  
 tgaggtaact cttgttaaaa aattgattta tatatttatt att 463

<210> 5565  
 <211> 466  
 <212> DNA  
 <213> Glycine max

<400> 5565

agcttctca atttttatgg attgatgctc ttaagactgc tgcgtatata ttaaatacaag 60  
 ttccaaccaa gactgtctca aagacacctt ttgagttatt caagggttg aaaccaagtt 120  
 tgcaacatat acgcgtttgg ggatgcccg ctgaagtaag aatttataat ccacaagaga 180  
 agaaactaga ccctaagact attactgggt atttcattgg atatgctaaa aggtctaaag 240  
 ggtatagggt ctattgtcca tcccacaaca ctaggattgt ggaatcaagg aatgcaaagt 300  
 ttcttgaaaa tgacttgatc agtgggagtg atcaatttca gaacatttct tctgaaaggg 360  
 atcactatga agctgaacct tctgggacaa gtaatagggt ggtagtcatt cccaccctc 420  
 aagttaaaat gggtggtaga caaccagtga ttgaagttca caagct 466

<210> 5566  
 <211> 421  
 <212> DNA  
 <213> Glycine max

<400> 5566

taagtgttta ggcttattcc atcataaaca actaacacat tgttggacct tgtggcctca 60  
 ataacttacg aaggggtgaa ttaattttcc actaacaaaa ttttaacacc cttttaaag 120  
 agataggctc aaaatgtaga agaagcaaca atgaatttaa taatgttctt taaacatgaa 180  
 agacacaatt gattgcaaca aaataaataa gataaggga gagagaatgc aaacacagtt 240  
 ttatactggg ttggcaaaat ctgtgcctac gtctagtact caagcaactc acttgagatt 300  
 ttcctttctc ttgtgaaatt cctttacaac tgttgaacca cacacgaaca acccatccct 360  
 tgtgttcagg aatgcttaca acttaagaga ccctctgtcc cttaatgaat ctctttgtat 420  
 a 421



<210> 5567  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5567

agctttaccc acaacatctc tcgccaatgg aacactgtat agtgacactt ccaggatctt 60  
 tgtgctttgg gggaaggatt cattgaatga ctgcactaca atttccttcc acaactatcg 120  
 tatcattgtg gatataccgg ttctttctttg tcagcatgtc ttttaaaaat ttggcataga 180  
 gtggcatctg ttgaagagct tctccaaaag gcaaagtgat ctctagcttc ttgaagatgt 240  
 caagaaatct ggctaagtgt cgctctttat ccttcttgga agttaccatt ggatatggta 300  
 cttcctttct ttcagctaaa ttaatctctc tctntgtgtc tctcgaaacc tcaactctggc 360  
 tcttcttttt ctgctcatca accttctctn tntcttntca attttctgaa ttttttcttt 420  
 ttctacttct tctt 434

<210> 5568  
 <211> 356  
 <212> DNA  
 <213> Glycine max

<400> 5568

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 aaagttatga ccatctgaat ttctcgagag cttccgttgt tcaattttga gcgtcttgat 120  
 atattatacg cctgaatcgg acctccgagt gaaacattat gaccatttga attgctcaag 180  
 agcttccatt gttcaatata gagcgactcg atttattatg cgccggaatc ggaccttcta 240  
 gtgaaaagtt atgaccatgt gaatttctcg agagcttccg ttgttcaatt tcgagtgtct 300  
 cgatatatta tgcgcctgaa tctgacttcc gcgtgaaaac gtttgaccat atgaat 356

<210> 5569  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<400> 5569

agctttgagc aattcaaag gtcattgctt ttcactcgga tgtccgattc aggcgcataa 60

tatatcgaga cgttcgaaat tgaacaatgg aagctcttga gcaattcaaa tgatcataac 120  
 ttttcactag gatgttcgat tcaggcacat aatatatcga gacgctcgaa attgaacaac 180  
 ggaagctctc gagaaattca aatggtcata acttttcaca cggaggtcag attcaggcgc 240  
 acaatatatc gagacgttcg aaattgaaca atggaagctc ttcagcaatt taaatggtca 300  
 taacttttca ctccgatgtc cgattcaggc gcataatata tcgagacgct cgaaattgaa 360  
 caacggaagc tctcgagaaa ttcaaattgg cataactttt cactcggat 409

<210> 5570  
 <211> 433  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5570

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 agaagaatgt tgcatttacc tgnngtgaaa aacaatagca agcctttgct ttgctcaaag 120  
 aaaagcttac taaggcacat gttctagctc ttcttgactt ttctaaaact tttgagctag 180  
 aatgtgatgc ctctggagtg ggagttggag ctatattggt aaaaggtggg caccctattg 240  
 cttatttttag tgaaaaactt catagtgcc aacctcaacta cccacctat gataaagagc 300  
 tttatgcctt aataagagcc ctccaaactt gggaacatta ccttgnttcc aaggaatttg 360  
 tcatttatag tgatcatcaa tcaacttaagt acattaggtg gaaaaacaag ttaacaagt 420  
 ggcattgcaaa atg 433

<210> 5571  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5571

agcttcaata cagtgcacc agtgtttcat tttangagct gacaaagtct tttggatggg 60  
 atacatatga ttctttcatg cagcatgatg ttcaagaact aaatcgggtt ctttgtgaaa 120  
 aacttgaaga caaatgaag gtatggcaag agttttggaa tatttgttca tgattattct 180  
 tgatgggtga ccatatcaaa tgggtgtttt gtgttatttg tcttcaggga actgttgttg 240

aggggaaccat acaaaaatta tttgaagggc accatatgaa ttacatagaa tgcacatg 300  
tagactacaa atcaactaga aaggagtcac tttatggtac ttccttatgc attttgaatt 360  
caattatatg ttttgttctt ccttggtatg tatttctaata ttagttttgc atatgcatgt 420  
tagaccttca gcttgat 437

<210> 5572  
<211> 459  
<212> DNA  
<213> Glycine max

<400> 5572

agcttatcac cacactcctt caaaccactg gccacaccac caacaacttc agcttcgtga 60  
atctcacttg cgactcccaa tttggcgta tctcgatcct cttccccgca ccgtactctc 120  
cctctaatac caccatcctc ttcttcataa agaagcgtga tggcactaga aaaccactga 180  
gcgccactac gctgaacttt ctctcatcg gtagggacac atcggttggtg gcgctaagct 240  
ggttcttctg actcttcacg aaccacccca tctggaaga aaagatcctc gcagagctaa 300  
cggttggtgct tacttccact catggcggtg accgacgaca ctggatggag gaggcaatgg 360  
acttcgaaga agcagagaaa cttgtttagt taaaagcagt gttagccgaa acgctacgtg 420  
ataataagtt ttatgttaaa taataaaata attttaaaa 459

<210> 5573  
<211> 422  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5573

tcaacattca atntcgagcg tctcgatata ttacgagact ctatcagaca tcagagaaaa 60  
acgttattgt cgtctgaatt tgctcagagc ttcaacattc aatttcgagc atctcgatat 120  
gttacgggac tcaatcagac atccgagaaa aaagttattg tcgattgaat tagctcagaa 180  
gttcaacatt caatttcgag cgtctcgata tggtacggga ctcaatcata cattcgagaa 240  
aaaattattg ccgttgaatt tgacacaggt taacattcaa tttccagcgc tcgatatgta 300  
cggggctcaa tagacatccg agtaaaagta ttgtcgttga ttgctcaaga ttcacattaa 360

tacgagcgtt cgatatgtac ggactcatcg acatcgagaa aaagtatgcg ttgaatggct 420  
ca 422

<210> 5574  
<211> 434  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5574

agcttccatt ntcaattaca agcgtttcga tatattactg gactcaatcg gacattcgag 60  
taaaaagtta ttgttatttg aatttgttca cagcttctgt attcaatttt gagcgtcttg 120  
atatattttg ggactcaatc ggacatccgt gttaaaagtt attgtcgttt gcatttgcta 180  
cgagcttccg ttttcaatta cgagcgtctc gatatattac gaaactcaat ccaacctccg 240  
agttaaaagt tattgtcgtt agcatttgcg acgagcttcc gttttcaatt acgagcgtct 300  
ctatatatta cgggacttaa tccaacctcc gagataaaag ttattgtcat tagaatttgc 360  
tacgagcttt cgttttcagg ttctagtgtc ttgatatatt acgggactta atcgaacatt 420  
cgagttaaaa gata 434

<210> 5575  
<211> 403  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5575

nganacaggg cttgataaag agctatttgg attccaatat gataagccag atatgcaagg 60  
caatctcttt aactccacaa agctatntct gaaatatgct gaagatgaaa ttgtacggat 120  
gaaagcagat gagagataag ccttgtacct tcgaaaagaa gttactgaat actttcatgg 180  
gaatgccaca aaggaagaag cccacctct cataattttc atgattagaa cagacttttt 240  
gaatatctcg gatctagtgt gcaaagaagt ggaaaagatg catgatagaa ttgttggtgg 300  
ttctggcaga tccttccaaa tacctcctaa tgcatcatta cctgttgcta acatgtacaa 360  
tcatcgacag caagatagaa gctcatatga cgaaagctca tct 403

<210> 5576

<211> 305  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5576

tactcgaatg tctgattgag tccccgaaca tatcgagacg ctcgaaattg aatgttgaac 60  
 ttttgagcta attcaatcga caataaaatt tttctcggat gtctggttga gtcccgtagc 120  
 atatctagac gctcgaaatt gaatgttgaa cctcttagct aattcaaacg acaataactc 180  
 ttttcacgga tgtctgattg agtcccgtaa catatcgaga cgctcgaaat tgaatgtnga 240  
 agctctgagc caattcaaac aaccataact tttntctcgg atgtctgatt gagttccgta 300  
 atata 305

<210> 5577  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<400> 5577

agcttaaaca ttcaatttcg agcgtctcga ttatttttgg actcaatcaa acatccgaga 60  
 aaaaagttat tgtcgtttga atttgcacag aggttaaaca ttcaatttcg agcgtctcgt 120  
 tatataacgg gaatcaatca gatatccgag taaaaagtta ttgtcgtttg aattggctga 180  
 gagcttcaac attcactttc gagcgtctcg atatgttacg ggactcaatc agacatccga 240  
 gtaaaaactt attgtcgttt gaattggctc agagattcca cattcaattt cgagcgtctc 300  
 gatatgttac gggactcaat tagacatccg agtaaaaagt tattgtcgtt tgaattggct 360  
 caaagcttct acattcaatt tcgagcgtct cgatatgtta cgggactcaa tgagacatcc 420  
 cagtaaaaag ttat 434

<210> 5578  
 <211> 431  
 <212> DNA  
 <213> Glycine max

<400> 5578

ctggccacca cggagtttcc gactatggtc ttgtgtggtg gaacaagcta caaaaggaga 60  
 gagcaagaaa tgaagagcca atggttgata catggacgga gatgaataag atcatgagga 120

agcggtagt gccggctagt tactcaattg acttgaaatt caagctccaa aaactaacc 180  
aaggcaacaa ggggggttgag gagtatttca aggaaatgga tgtgctcatg attcaagcaa 240  
atattgaaga agatgaggag gtaactatgg ctcgatttct taatggtttg actaatgata 300  
tccgtgatat tgttgagctg caggagtttg ttgaaatgga tgatttgctt cacaagcaa 360  
tccaagtgga gcaacaatta aaaaggaagg gagtggtaaa aggagtttac caactttggt 420  
cttctagtgg a 431

<210> 5579  
<211> 420  
<212> DNA  
<213> Glycine max

<400> 5579

agcttctatg gataatgtta gtgttatcat tgctattctt agaagctttg aaatagcttc 60  
tggcctgaga atcaattctg ccaagagcca actgggagca attggtcaat ctgatcagtg 120  
gatcagatgt gctgctgac tcttgaattg tggccactg cagcttcctt tctgctacct 180  
agggctgcct atagggtgtca atccgagaag gaagggtgtg tgggaaccta ttatcaacaa 240  
atgtgaggct aaactgaaca aatggaggca gagaagtata tccatggctg gtagaatcac 300  
cctaactaat gctgtcttaa cagctctgcc attgttttac atgtcttttt tcagggtcc 360  
ttcagcagtg attaacaagc tcatttccat ccaaagaaag tttctttggg gtggtaacca 420

<210> 5580  
<211> 395  
<212> DNA  
<213> Glycine max

<400> 5580

agcttgaaat tgaacaacgg aagctctcga tatattcaaa tggctttaac ttttactcg 60  
gatgtccgat tcaggctata tcgagacgct cgaaattcaa caatggaagc tctcgagaaa 120  
ttcaaattgt cttaacttat cactcggatg tccgattcag gtgcataata tatcgagacg 180  
ctcgaaattg agcaacggaa gctcttgagt aattcaaatt gtcataactt ttaacccgga 240  
tgaccgattt aggacatcac atatagagaa tctcgaaatt gaacaacgga agctctcgag 300  
agtttcaaat ggtcataact tttcactcgg aggtcagatt caggcgcatl atatattctag 360

acgctcgaaa ttgaacaacg gaagctctcg tgaaa

395

<210> 5581  
<211> 438  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5581

cttaagcacc gcagctgcag ctctataaac cacacttttt tatatggctt gancagngcg 60  
aacttacgtt tgaatactct atacatgcag acacatgcaa cacattatgt tttcactgat 120  
aataaaaaaga gaaatgttta gaaacacggt gactcgctct atcgaatata tcccccttca 180  
tttggctgaa aattttttaa atgaaaaaag tttgcgaatc ctactcaata attaacgacg 240  
ttttccttct aactttatgc acaaaaaact tgtttaatag agcgtgttct tatggcttat 300  
caaataaaaa aataaaacat acatgcacgt caataagtca ctactcggtc tatgctgaca 360  
ggttagaaag taatctacat tgggaagtgt gatgctaaca ttctattttg ttcgattgaa 420  
aaaactgcgt actttctt 438

<210> 5582  
<211> 397  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5582

ggccgccacg gagtnttccg actatgctct tgtgtggtgg tacaagctac aaaaggagag 60  
agcaagaaat gaagagccaa tgggtgatac atggacggag atgaaaaaga tcatgaggaa 120  
gcggtatgtg ccggctagtt actcaaggga ctngaaattc aagctccaaa aactaaccca 180  
aggcaacaag ggggttgagg agtatttcaa ggaaatggat gtgctcatga ttcaagcaaa 240  
gattgaagaa gatgaggagg tgactatggc tcgatttctt aatggtttgg ctaatgatat 300  
ccgtgatatt gttgagctgc acgagtttgt tgaaatggat gatttgcttc acaaagcaat 360  
ccaagtagag caacaattat aaaggaaggg agtgact 397

<210> 5583  
<211> 387

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5583  
  
 agcttaaata ggtggggttg tccgttctcg ctagcttagn gcaaatttga atcgcttagc 60  
 acacataagt ggatttttgg ttagcgtgct tctctcgctt agtggatgag ctgaagcggc 120  
 tcgcttgatg acctggagca gtgcgctcag tgaacctgac aactcatctt cttctagatt 180  
 cttcctcagc cttaaatagc aagtctcat ctacctccat ggcttcctat ggtggtgagc 240  
 ttgttcttga ctcattcttct ccttgaagtg gcattctaaa tcagctttct tccttctcca 300  
 ttcaactacc attgatcttc aagaagcaaa agactccatt gatgaagaag attcaaggcc 360  
 cacgagctct acatggagct tcattag 387

<210> 5584  
 <211> 271  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5584  
  
 agcttacacc agtatcggat gtatattact tttggagaca tattggtaca acttctaact 60  
 ggaagacccc ttttggggct agttagagat atgaaatgtg cattggaaaa ggaaaacctt 120  
 aaagcagtct tggactcttc agctggtgaa tggccgtttt ttcaaactga acagctggca 180  
 tatttagcat tgaggtgttg tgaaaagact tggttgaacc ggccagacct tgtgtctgaa 240  
 atctggagtg ttcttgaacc attcanagca a 271

<210> 5585  
 <211> 370  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5585  
  
 agcttcggaa aggtctggag ggagttatag atgtatgatt ctagacngc acgggacaag 60  
 gcgatgatgc tattccggta cttgcgagaa aaagacatgt ttgagaagta ttacaatctg 120  
 catatggcaa agcggcctttt gtcgggaaaa acagtttctg atgatgcaga aagaagtctc 180



atagtcaggc tcaagaccga atgcggttat caattcacct ctaaattaga gggcatgctt 240  
 accgacatga aaacctctct agaaacaatg cagggccttt atgccagcca ccctgagtta 300  
 agtgacagtc ctacacttac cgtgcaggat ttgacctcag ggttttggcc tactcaatct 360  
 actgctatat 370

<210> 5586  
 <211> 384  
 <212> DNA  
 <213> Glycine max

<400> 5586

agcttgtgaa ggaatacctt gaagattatt ccttaccagt agtaattgac cgtaactttg 60  
 tgattgatgc gctaccttcg ggaaaaatca atgaccttcg caaaaatata aagctggtaa 120  
 tgggcgttgg gtttgcaaag gagtgtctac aggtgtactg taactggagg agggaaagct 180  
 taaaggagtg cttaataaat ttattaggct tgccagagat taatgtggag gagaaaagta 240  
 gattgttga atttgaaaat tacattctta gaagacgtat tgaggctatc caggctgctc 300  
 ttggaacact aattcccagt gagcgacgac tctgtgatag cgtcttccag gggttctctt 360  
 atgtggctga tctttgtttc actg 384

<210> 5587  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 5587

tgaggcatgc aagcttgtgc atccaatacc ctgatgtgga tgttttatat tttcttaaaa 60  
 ctggactgat gcatttgctt ccaaagtctt atggccttgc acgtgaagac ccgcacaaac 120  
 atctgaaaga attccatatt gtctgtcca ccatgaaacc ccagatgtc cagaaggatc 180  
 acatatttct gaaggccttt cctcattctt tagaggagat gacaaaggac tggctttatt 240  
 accttgctcc acagtccatc acgagttggg atgacgtcaa aagagtattc ttagaaaaaa 300  
 tttccctgc ttcgagaacc acgaccatca aaaaggatat ttcaggcatt agacaactca 360  
 gtggagagag cttatatgaa tattgggaga gatttaagaa actatgtgcc 410

<210> 5588

<211> 387  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5588

agctttgaaa aaggaaggtg gtgtatantc tttataacaa gctcgggaat attttgagag 60  
 cgtgtgcgca aaatattaat taataccatg tgtcagaatg gtatattttg ttttaccgca 120  
 tgttaaagtg acatatttaa tcatttttca tatattttac taagttttat caacctaa 180  
 attgaataat gttatttaaa cttgttattc agaagaaaaa aacatgttat ttaaatttga 240  
 tgattatgca tattaaattn taaataaccc agggattcat aaatcataaa tatgtaattt 300  
 aatagtattg cttattggaa atagcatatt atacattaaa ataaaacaat ttatttagaa 360  
 ttaaatagat ctttaattaa gactatg 387

<210> 5589  
 <211> 377  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5589

agcttcaaga ataanggttc tagcttattt cttattccca gaaggaaatt caataaatag 60  
 gcctcctatt tttaatggag agggttacca ctactggaaa acccgaatgc aaattttcat 120  
 tgaggcaata gacttaaaca tttgggatgc catataagtt ggaccttatg taccaccat 180  
 ggtggctgga aatacaatag agaaacctag agaagagtgg tctgaagatg aaagaagatt 240  
 agtgcagtat aatttaaagg ctaaaaatat tattacttct gccctaggaa tggatgaata 300  
 ttctatggtt tcaaattgta agagtgctaa cgatatgtgg gacactctac aagttacaca 360  
 tgagggaaca actgatg 377

<210> 5590  
 <211> 388  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5590

agcttttcaa gcccnattta cngcgtttac taccttngcc ggcnggggaa ttgcgaactt 60

tgatcaaaca tttgaggtta ctaccgacgc gtcaaattct gttgttggag cagttttatc 120  
 tcagcaatcc catccattg cttttttcag tcgcaagata tgtcccaaaa tgcgggctgc 180  
 atctgcttat gagagggaaa tgtttgctgt tacggctgca gtcaaaaagt ggcgacatta 240  
 tctcttggga aggcattttt tcatttatac ggatcatcgc agtttaaagg aattgataac 300  
 gcagacgatt cagacgccga cacaacatat gtggttaact aagctattgg gtttaactat 360  
 gagattgata caccgccgaa agaccaac 388

<210> 5591  
 <211> 395  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5591

agcttgccac cacgaagttt tccgattatg cttttgtgtg gnggaacaag ctacaaaaag 60  
 agagagcaag aaatgaagag ccaattgttg atacatgggc ggagatgaaa aggatcatga 120  
 ggaagcggta tgtgccggct agttactcaa gggatttgaa attcaagctc caaaaactaa 180  
 cccaaggcaa caaggggggtt gaggagtatt tcaaggaaat ggatgtgctc atgattcaag 240  
 caaagattga aaaagatgag gaggttaacta tggctcaatt tcttaatgtt ttgactaatg 300  
 atattcgtga tattgttgag ctgcacgagt ttgttgaaat ggatgatttg cttcaciaag 360  
 caatccaagt agagcaacaa ttaaaaagga aagga 395

<210> 5592  
 <211> 332  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5592

agcttcttag ttgcagatta ttctttttat tttgnggcta cctcatgcac tgctctaag 60  
 actatagcat catttctggc gctaaactgc ttgggccaac aacattttga aaataatgct 120  
 gttgatgttg ccgctgttgt ggaggactcc atcatctaag gttgggatga ttcctccacc 180  
 cgagatgggt cctgttgctg gagaggatcat aattgctctg ccgtggctga ttttgctgtt 240  
 gaggttgagg aagtctattg tatatgacgg cagcatatgc ttcaagctgt ccaattgctg 300

cacagaaagg cgaaggtctg tatggtggtc aa

332

<210> 5593  
<211> 365  
<212> DNA  
<213> Glycine max  
  
<400> 5593

agcttcttgg tttctccgtt gaatgtgaag aaaaaatgtg gatttatgag ggcattgcca 60  
accaaagctt gaactactgt gtttttgggt ggaccctta caatttattc taaacatcag 120  
ctgaaatctt ctttaaagaa ttgtggagac agaaactgct attcctaata tgtgtgtatt 180  
tgactagctg aaaccaaag gaagttgcat tgcgagggga cttctttatc ttcaccaaga 240  
cttcaggctg aggattattc acagggatct aaaaactagc catattttgc tggatgcaaa 300  
tttggatcca aaaatatcag actttcgctt ggctcgatca ttttgggaga ccaagtgagg 360  
gaaac 365

<210> 5594  
<211> 397  
<212> DNA  
<213> Glycine max  
  
<400> 5594

agctttgaac catacaagga caaccttttt ctttgtgttc agattgcttt acaacaagag 60  
acccttggtc tcttaatccc ttttcagaaa taagatgaag agaagaagaa atctctcttg 120  
aaagagatag attgaacaat ggagcactca aataattcct tattgaattg caagtgtatt 180  
ggccaaggaa tttttaagag gataagacaa ttttggtttt gagaggataa gacctttttg 240  
ttctaaaaaa ctctaagcaa atttgtgttc caagtcacat ataaatagac ccttgatggc 300  
cattcaaaaa ccatttgaac agatgtgact cttggaaatt attttttgaa aatctcctct 360  
ggtaatcgat tacaagattt gggaatcga ctatagg 397

<210> 5595  
<211> 391  
<212> DNA  
<213> Glycine max  
  
<400> 5595

agcttcaaca ttcaattttg agcgggttcgt attattacgg gactcaatca gacatccgag 60  
taaaaaattta ttgtcgtttg gattgggtca gagattcaac attcaatttc gagcgtctcc 120  
atatattacg ggactcattc agacatccga gtaaaaagtt attgtagttt gaattagctt 180  
agagcttcaa caatcaatth cgagtggttc gttatatcac gagactcaat cagacatccg 240  
agtaaaaagt tattgtcgtt tgaattgggt cagagcttcc acattcaatt tcgagcgtct 300  
caatatatta cgggcctcaa tcagacatcc gagtaaaaag ttattgtcgt ttgaattggc 360  
tcagagcttc aacattcaat ttcgagcgtc t 391

<210> 5596  
<211> 355  
<212> DNA  
<213> Glycine max

<400> 5596  
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atagggttga cctcccataa gagtatgcag ttagaacttt atagggtggag ctaatactga 120  
ggagcatgaa ccaacagatt tgagggtcaaa tctcttcaa aggggagtggt gtgatgcaat 180  
cctccctagg aagggttagt tcaccaaagc catgaacaag aggctccaag aggattgggc 240  
tagagctgtt gtagaaggcc ctaggattct catgaacctt acggtagatt tctgagccca 300  
tgggccatgt tgtgtccact tatctgtgta catattagat taggatttca ttatt 355

<210> 5597  
<211> 390  
<212> DNA  
<213> Glycine max

<400> 5597  
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acagaataaa agttaaattg ggagaagatg tcatatcaca ggttttctaa gtttgatgat 120  
ctaggattca tcatataaaa ggatggagaa attaatgagg atgtatagga tacatgtggg 180  
atggcttaaa tgggtgaaaag catcgagggt tatttgtgat tgccaagtgt ctaccaagct 240  
caaaggcaaa tttttattgga caactatacg tccaactata ctatatgata gtgaatgttg 300  
ggtttttaaag ggacaacatg agagaaaagt gagatttgca gaaatgacga tgttaagatg 360

gatgtgtggt gatataagac aagataaaaa

390

<210> 5598  
<211> 392  
<212> DNA  
<213> Glycine max  
  
<400> 5598

agctttgcta atgtcgattt tcaaattctt tttattgtct ttcctttttg tgggcacccc 60  
atatggtgaa tatatttagt ggcacacatt ctctctgctc tccctaaata tttttttaaa 120  
aaaatttaag aatgagtggg agagagaaat aaatgagttt taaaatataa acattaaatt 180  
accttattat ccgtaaataa atttattatc ataaaataag tagttaagtt ttttgcctaa 240  
ataatttggt atgttaacat acccctttat atttatatct tttttatttc ttaaaacata 300  
atgttgaact atactttcta aaacaacata tatcaattcc ataaagtaat ttttaggact 360  
atgttttaat aaaatacaca taattatgga at 392

<210> 5599  
<211> 398  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5599

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ccctcattaa gaactagctc ttttcttctc ctattgccta tagttgaata cacctttgtt 120  
tggttctcta tttggttctt aaccctctca tgcaacttct ttacaaattc tgacctagat 180  
tccccttctt tatgtataaa agaagtgtct agtgggatgg gaatgaggtc taacggtgtt 240  
aggggattga acccatagac aacctcaaaa ggggactgct tgggtggttct atgaaccccc 300  
ctgttgtagg caaattctac atgaggaaga tactcatccc aagtcttatg gttgcctttc 360  
agaagagccc ttaaaagggt ggataaagac ctattcac 398

<210> 5600  
<211> 405  
<212> DNA  
<213> Glycine max

<400> 5600

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caatgaagat caacaaagta tggacttttag ttgaagtttc aaaggatata aaaccaattg 120  
gttggaatg agttttacaag aaaaggattg gagcagattg gaagattgaa acctacaaaa 180  
cgcatcttgt tgccaaggga tattgtcaaa aggaaggat agattatgat gaaacttctc 240  
tcgtggaaat gctcaaatta attcggatta tttttgctat agtagcatac tatgatcatg 300  
aaatatgaaa tggatgtggg aaatgtcttt ccttaacggg gagctaaaaa aaggtgtgta 360  
tatgacacaa ctcaagggat tcacatcctt gtttgatcat aataa 405

<210> 5601

<211> 388

<212> DNA

<213> Glycine max

<400> 5601

agctttgctt ctacacactc attctatgaa atatcttgcg gacatgggaa gaggtggtgt 60  
agaagtctt gaataaatat tttccagtgt ccaagaccac tgaggggaag gtggaaatct 120  
catcattcca tcaattccct aatgaatcaa tgagtaaagc tcttgaccac ttccatgggt 180  
tactctagaa gaccttact catggattta gtgagcctat tcaactaaat atattcattg 240  
atggcctgtg accccatttg aagcagcttc ttgatgcac tgctagtga aagatcaaat 300  
tgaaaacaca tgatgaaact atggagtga ttgaaaacat ggagacagc gaccatgcca 360  
tcctttgtga ccgagcttac acatcgac 388

<210> 5602

<211> 382

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5602

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ttctttctgg ctccattcac taccacagaa gcaccctga ggtattacac tcaaatgtat 120  
ttcaggttcc ttccattttt ggcctttttt tttttttatc aaatgggcac cttaaagtat 180  
cttccttttt tcagatgagg ccagatctta ttcaaaaggc aaacgaagga ggtttggatg 240

tcattcaaac ttatgttttc tggaatggac atgaaccttc acctggcaaa gtaatgaata 300  
 atgtttgctt gcagtgnntg aaaaaaatgc atttttttgt cgctattatc tattntaaca 360  
 agtttagctg tttttgttgg ta 382

<210> 5603  
 <211> 354  
 <212> DNA  
 <213> Glycine max  
 <400> 5603

agctttgagc aaaatcattc gatattttct ttttactcgg atctctgaat gagtcgcgta 60  
 atatatcgag atcctcgtaa ttgctaacgg aggctctgag aaattttctaa cgacattaac 120  
 tttgtactcg gatgttcgat tgtgtcccgt aatatatcga gacgctcgaa attcaaaata 180  
 gaagctttga gcaaaatcga acgacaatta cttttgactc ggatgtccga tggagtcctg 240  
 taatatatcg agacactaaa aattgaaaac cgaggcgctg agaaaattca aacgacaata 300  
 actttttaca caatcatgat gcttaaaatt cacaacagaa gctctgacat aaat 354

<210> 5604  
 <211> 335  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5604

agctngtaca ctttatttta ttncataatt nnganngcag aactcgagca cagtttatct 60  
 ggtccaaata ccgctaagga acagnnggag caggaacaat ttgcaatttt ctgcgaacat 120  
 cttccaagtc ttcatgaaaa tgttgctcat aatatacaca cataagatca gtcgattgca 180  
 tgccagcacg aatggcccaa gggaagtagt gctgataaaa caattttctc tgcttttcat 240  
 tgaatctagc cgtgccccct ataacggaca gcagacacat aggaaggccc atctgctcaa 300  
 attcaatgag cttcagtgct tgctccccaa tcaag 335

<210> 5605  
 <211> 395  
 <212> DNA  
 <213> Glycine max



<400> 5605

agcttcaagt agaggggaata tgatgtataa gattaatatg actatggcta tgatcactac 60  
aaacaatacc caagtttcag gagaatcctg cagtcctatat gccctattga gggaagggac 120  
aataaatttg cacccttga ttttcaaacc caaaaaagat ttgacaatca ctacttcata 180  
aacattcttg aagggaaagg cttgttagat tctaacaatg ttcttatcaa ccatgactta 240  
gatggaaaga ttacagagca gatgtgggct tatgcctcta atgaaaaact tttgtttgct 300  
tcatttgcta aatctatgat taagatggga aacatcaatg ttcttacagg aaatgagggg 360  
gaaattagga ggaattatag gtttgtcaat gctta 395

<210> 5606

<211> 343

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5606

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gtatactttc aaggttcatg tattgtgcta gtgaagttca tcttcaagct gccaaacgag 120  
ttattagata tgtaaaggc acttttagact atggtataat gtactctcat tctcataatt 180  
ttaagctcca tgaatattct gatagtgact gggcatgttg tattgatgac atgagaagca 240  
cctctggata ttgattttcc tttgggtctg gagtcttttc ttggtgttct aaaaagcaag 300  
aaagtgtatc tcaatcaact gcaaaagcaa agtatgtaac tgc 343

<210> 5607

<211> 315

<212> DNA

<213> Glycine max

<400> 5607

tgtcctcggg gacgaagaca attgaattag ccccttctag ctttgcacag gcgtaacga 60  
ttctcaaaat gaagggctctg tgtttggaag tggcgatgag gtggagaaca acctctgtgt 120  
atgaggtggg gttgaagatg gaccgctgt actcaatgtt tgttcacagg gtacagtaaa 180  
ttataaagtt gccgttggtg gccacgccga cggagccgaa gctgtatccg gcgactaaag 240  
gtagcacggt tattagcatg gattggccgg cgggtggagta tctgtcttgg ccgatggcga 300

ggctgcctgg gagct

315

<210> 5608  
<211> 361  
<212> DNA  
<213> Glycine max  
  
<400> 5608

agctttgatc taacaccgcc acttctacca tcatcttaga tttctattat gttaaatatta 60  
ttagtacttt aatctccagc cgtgtatttg gctatattat gatgatattt gaacaattta 120  
atatttcttt atttgcattg tatgtttgaa caaatattaa ttacgttatt tgactatgtg 180  
gattttatat ttgatctatt catggttctt gtttcattgt tcttgcttta tgatttggtt 240  
tatatttttc atgaatgttg tgtgaatgct tagttgatat ttgtatgtta cgcactttgg 300  
ctttttgttg atgccaaaagg gggagagaaa tagggatgaa atcaacaaga aataaggatt 360  
a 361

<210> 5609  
<211> 316  
<212> DNA  
<213> Glycine max  
  
<400> 5609

ttttattggt gtttagatgg atattttggc tatttgcaaa ttccaattgc taggagggac 60  
caagaaaaaa ctacttttac atgtccctat ggaacttttg catatagacg gatgtcattt 120  
gaactttgta atactcctgc tacttttcaa agatgcatga tgtctatttt atttatttat 180  
ttaattgagt cttgcattga aatactcatg gatgatgttt ctatttttgg aacttgtttt 240  
gacacatggt tgcataactt gaatgtggtc ttgaaaaggt gtagggatac aaggttagtc 300  
ttgaacttgg aaaact 316

<210> 5610  
<211> 357  
<212> DNA  
<213> Glycine max  
  
<400> 5610

agcttactcc tcattttatc agttcttacc aaatcgtaaa aagagtcaac ggagttgcct 60

attaaattgc cttgtcacca tccctctcaa atctcaatag tgtcttccat gtctcccaac 120  
tcagaaaata tatctatgat ccattaccaa tgaggattga ggaaaaaatg gtgaaacaac 180  
taagagagaa ggatattcct ttgatcaagt ttgtgagcgg aggagctact aaagatagtg 240  
ctacatggga gttggaaagc cacatgggag aatcatatct tggtttggtc ttttcagcta 300  
aatttcaagg acaaaatttc ttttaaggag gggggaattg taacatcctt ctattttt 357

<210> 5611  
<211> 317  
<212> DNA  
<213> Glycine max

<400> 5611

agctttacta tgcagagaat attcaaggaa aataccttca tctgacttag catcaaattt 60  
tcctaagtta tcttttccat tattcaatac aaaacattta caaccaaaga tatgaagatg 120  
agagatgttt ggttttctgc cattgaccaa ttcatatgga gttttcttta aaatgggtct 180  
tattaaagcc ctatttaaac tgtagcatgc agtggttaacg gcttcagccc aaaagtattt 240  
tggaagagga gtatcattta ataaagttct agcaatctct tccaaagatc tatttttctt 300  
ttcaacaaca ccattttt 317

<210> 5612  
<211> 305  
<212> DNA  
<213> Glycine max

<400> 5612

tttacctttc attttaaccc ttaaaacttc cctgccaaaa ttgtcataga taaagcaatg 60  
ttgatgttca aaggacactt taaatccctt tttaatcaac tgacctacac ttagcaagtt 120  
ttggtcaatg ttaggtacat aaagaacatc tgatattaat ttggtacctg aacacgttga 180  
aattgcaaca gttccttttc cttttactgg aatatagcca ccattcccaa ttctgacctt 240  
tgagacatta gttggcttca aatccttgaa tagagtctta tcatttgtca tgtggttcgt 300  
acaac 305

<210> 5613  
<211> 325

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5613

agcttttagtg ngtagtgtca agtttttaggg tttactgtgt aggggtctaata ccttatgggtt 60  
taggatttag ggtgtagggg ttatgggtta aaatttaaag gtaatgggtt aggggtcaagt 120  
cttagcggtt aggggttagg ttttacgggt taggggtgaa ataaaattac tccaaactca 180  
tatgcatcta atgaaataaa attacattta gaagttgaaa taaatggagt ggatcaagcc 240  
agggttgagt acttttagtta tccataagta aaccttaata aactgaatac catacattac 300  
gtgtgaaatt caaatgagaa attta 325

<210> 5614  
<211> 360  
<212> DNA  
<213> Glycine max

<400> 5614

agcttcaaag actaattcaa ggatataaga gtgtggacga gtattacaaa gggattgaga 60  
tttccttgat tagggctcaa attgaagagt atcaagaggc taccatggca aggtttttgc 120  
atgggtctcaa taaggtaatc caagacatta tagagttacg ccactatgcc tctttttgga 180  
ggatctcatt catgaaacta tcaaggtgga gcaacaatta aaagggaaac aaatatacaa 240  
gaagtccccc tatgtgtctt caacatagga ggataaggag acattcaaga agaagggagg 300  
atcttcattc aaatctcatg agaaagatgc tgcacttagt aaaaataatt taaaccctac 360

<210> 5615  
<211> 313  
<212> DNA  
<213> Glycine max

<400> 5615

tttatataac aaagtgaaga tattaaaatc acacagaagt aggcttgaaa aaatgacata 60  
aagtttttta ttatgaaaaa caattgatta aatatttggt gtatataaaa tattatcaaa 120  
tcaatcataa gagttgatat tatcaaaacc aataacttaa aacataatat taacattaat 180  
tttcaattac ttcaaattat caataattaa aaacaaataa tttaaaacaa tatttcaaaa 240

tgcattggtat aagagacata tctagtggag gactgtttct atatgagaat gggagggtgaa 300  
atattgtgaa ctt . 313

<210> 5616  
<211> 283  
<212> DNA  
<213> Glycine max

<400> 5616

tctggtcggt gctgattctt ggtatacccc ttttacacct tcatgtacct ttcaattgga 60  
tacgtccagc gtaaaaaatat aggaccacac aactggatct ccttgactag atgaacaatt 120  
atgtgaacca ttatgtcgaa aaatgatgga ggaaagtaca tctccatttg acaaaggaaa 180  
atggcgacct cgttctccaa ttcaccaat cttgcagggt caataacttt gctacatata 240  
gcattaataaa caaagccttg accagttatg gcttcccaa aat 283

<210> 5617  
<211> 351  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5617

ggagagggga tgaaattttt ccaactctcc taatgtctat cgaggagtcc gaggtttcgg 60  
tgatcttctt gtccataaac tacatatgcc acttctaagt ggtgcttga agagctcgtg 120  
aaaattatgg aatgcaaaaa aacaaagggt caaatcgtga taccattttt ttatcatgta 180  
gatccggcag atgtgcggaa ccagaccgga agttatgcag atgcttttgt gaaacatgaa 240  
caacnctna naaacaacnn ncaaaangnn naacccnga aagacacnnc gagagaagca 300  
gccaacctct ctggattgga ttgcttggtc aacangtttt tttccaatta a 351

<210> 5618  
<211> 325  
<212> DNA  
<213> Glycine max

<400> 5618

tcttcttgac tcatctactc cttgaagtgg tgtctccaat catctttctt ctccattccg 60  
ctaccatgat cttcaagaag caaaggactc cattgatgaa gaagatccaa ggactacaag 120

ctccacatgg aagctcgaca atggacacaa aagccataac atttgactca aatgtttgat 180  
 ttacgaaagc tcagagaaaa ttcagactgt cataactttt gacttgaatg tctgattgcg 240  
 tactataata tatcgagata gtcgaagttg aacacggaag ctctagcaa actcaaacta 300  
 ccataacttt ttattcaa at gtctg 325

<210> 5619  
 <211> 318  
 <212> DNA  
 <213> Glycine max

<400> 5619

tgacaattat tatttattac atttaacttt ctctcccaaa aatgctgtgt ttagggaaca 60  
 ttaccaa atg gacaagaggt cgctgttaag aggttttcac aaacatctag acaaggatta 120  
 aaagaattta aga atgaggt tatgttatgt gccgaactcc aacatcgaaa tcttgtaaa 180  
 gttcttggat gttgcataca agatgatgag aaattgctca tatacgaata tatggctaac 240  
 aaaagcttag acgtctttct ttttggttag tgtctctaaa ttttaattgtt aattgaatgt 300  
 tggatctatt atttcctt 318

<210> 5620  
 <211> 320  
 <212> DNA  
 <213> Glycine max

<400> 5620

tcaacatcag accacttcca ggggtgctgga actacttcac atggacttga tggggcctat 60  
 gcaagttgaa agccttggag gaaagaggta tgcctatgtt gttgtggatg atttctccag 120  
 atttacctgg gtcaacttta tcagagagaa atcagaaacc tttgaagtat tcaaagagtt 180  
 gagtctaaga cttcaaagag aaaaagactg tgtcatcaag aga atcagga gtgaccatgg 240  
 cagagaattt gaaaacagca ggttcactga attctgcaca tctgaaggca tcaactcatga 300  
 gttctctgca gccattacac 320

<210> 5621  
 <211> 378  
 <212> DNA  
 <213> Glycine max

<400> 5621

atccctaagc gaccgcagct gcagcttgca taccctttga tcttttatga aattacttgt 60  
gaaagatagc catgaggggtg ggctcatggg ccactttggg atagacaaaa cccttgtctt 120  
actcaaagaa aagttttatt ggccccatat gaagaaagat gtccataagc attgcactag 180  
gtgtgtggct tgtttacaag ccaagtctag ggtgatgcct catgggctat acacaccctt 240  
acccatccca tctgcacctt gggtagacat tagtatggac tttgtccttg ggcttcctag 300  
aacccaaaga ggtgtagact ctatctttgt ggtgggtggat aggttttagca agatggcaca 360  
ctttatacca ttccacaa 378

<210> 5622

<211> 313

<212> DNA

<213> Glycine max

<400> 5622

ttgatgcaac atttggagag gttaatgaaa ctacgagatg atgcactcca tgagaggttg 60  
gatcaaatgg agaatagaga tcataatgaa gaagaaagga ggagaagagg gaatgatggt 120  
gttcctagac aaaaccgaat tgatggtatt aaactcaaca ttcctccatt taaaggaaag 180  
aatgatccgg aggcctactt ggagtgggag acgaaaatag agcatgtttt ctcatgcaac 240  
aactatgagg aggaccagaa ggtgaagctt gccgccacgg agttttccga ctatgctctt 300  
gtgtggtgga aca 313

<210> 5623

<211> 356

<212> DNA

<213> Glycine max

<400> 5623

agcttgaaat tgaacttcgg atgttcttca gattctcaaa aggacatagc tgatcacacg 60  
gaggtccaat tgaggcgcac aatatatcga gacgctcgaa attaaacaac gaatactctc 120  
gagaaattca aatggtcgta acttatcaca cggaagtccg attcaggtgc ataatacatg 180  
gagacgctca aaattgaacc acgaatgctc tcgagaaatt ccaatggtca taacttttca 240  
aacggaagtc cgatttaggc gcataatata tcgagaatct tgaaattgaa caacggaagc 300

tatccagaaa ttcaaattggg cgttacttgt cacacggaag tccgattcaa gcgcat 356

<210> 5624  
<211> 309  
<212> DNA  
<213> Glycine max

<400> 5624

tgaaggcaaa ctggatgcgt tgggtcaactt ggtaaccag ttggccttga atcagaaaatt 60

tttacctgtc gcaagggttt gtggtttgtg ctctctgtc gaccaccata cagacctttg 120

cccttccatg cagcaacctg gagcaattga gcagcctgaa gcttatgtc caaatattta 180

caatagacct cctcaacctc agcagcaaaa tcaaccacaa aagagcaatt atgacctttc 240

cagcaacaga tacaacctg gatggaggaa tcacctaac ctcatgtgt ccagccctca 300

gcaacaaca 309

<210> 5625  
<211> 341  
<212> DNA  
<213> Glycine max

<400> 5625

agcttaccat taattgtaca tcttttgtgg agaataattt ccctttgggt gtcattcagt 60

ggctgcattt gactttccaa gagccttctc accattagta tatcaccctg catagcttcc 120

tcttcaagct catcctttgc ttcttcttct tcaactaatt cagattcact agtgatttct 180

ccatctgcct tcatgatcat ggttttcttg gttggacagt cagaagcaat atgtcctctg 240

cctaagcatt tgaagcattt tatgtttctg gtactggtgt tggatgatga agcaaaatta 300

tgcttggttt tagcactgaa aactgttgac tttccatggg g 341

<210> 5626  
<211> 357  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 5626

agcttatgga gactttctcn tntttacaac aaggcctgct tgaccttctg actgctgaga 60



gctagagact tttctttctt aggtgcttcg tcttggttaa gttcatgttc atgaacttaa 120  
gagtaccaat taattcttta aaggaaattg agtcaagatt ctttaaaacc cttagtgttg 180  
ttacttgtaa atgtggctcc ttgtagagct tgtaggcctt ggatcttctt catcaatgaa 240  
gtccttcgct tcttgaagat caatggcagc ggaatggaga aaaaggaaag gttattggag 300  
atgccacttt aaggagaaga tgagtcaaga acaagctcac caccatagga agccatg 357

<210> 5627  
<211> 354  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5627

agcttgccca aggtcttcta acttttcata aatggtaggc atgggaaatg tgtccttcac 60  
cgtgatggag ttcaaagccc tataatccat gcaacaacgc catgaaccat ttttttttct 120  
taacgaggag gatgggtgaa gaaaatgggc tatggctggg ttggatcagg ccggccgcaa 180  
gcatggagga gatttgggat tcaatctcgg ctttttggaa gtggggataa tggtagggtc 240  
ggacattcac aggantgaaa ttgggaaaaa ggggaatatg gggctgaata ttgcggggcg 300  
gaggtagggg gggtgggtca aggaagatgg cggagtaacg gtcaaggagg gtgg 354

<210> 5628  
<211> 316  
<212> DNA  
<213> Glycine max

<400> 5628

ttgcaaagaa aaatgcagaa accaaaaaat acccctgggt ttcatacagc cgttgtccat 60  
cgaggtactg aacaaaacca tcaatgagat atggaccaac ataagaagcc aaagtgttta 120  
acaatacaag aaaagctgtg ataagaatct ccttccatgc tgaaattatt aacgacttca 180  
ccaacttcag tgtggtgaca ctattaattc caccacaatc agcctcaact ttctctctga 240  
aagttggaaa agtaccaatt acactatctc tgctgtctag ttgaggaaca tcctcaagg 300  
ccagggtctt ctgatt 316

<210> 5629  
<211> 347

<212> DNA  
<213> Glycine max

<400> 5629

agcttatcaa catcaaactt ggttaaagag ggcttggggt caagacatga gaagcaatca 60  
agtataatgt tacttccttc actaaagcgg tgatctatct ccacacatat tttatcaata 120  
gcaacataaa aaatctttgc acggtaatga tgaagattag tgatagtcac cccttctgct 180  
cttgaacgac cccgaaccgg tatttcgtca tccatatttg gtaccggaat acttttagct 240  
acacaaaatc cttggacatc ggcaaaaaaa ttattccagc cactctctct cattgtgccc 300  
aaccgagctt tgacaacatc aactaattcc atggcaatca caatatt 347

<210> 5630  
<211> 321  
<212> DNA  
<213> Glycine max

<400> 5630

ttggagtttc caagtgccaa ttcgtcttct tttttgtcc agtcttcttc tggcttcaat 60  
tcatcagtgg gctttccttc tgtgtccgc atcttgggat gttcccagcc tttgatgaca 120  
gctttccagg ttctgctatc cagcgatttg aggaaggcca ccaccttgc tttccagtat 180  
tcatagttag ttccatccag aattgggtgg ctgttccactg gtcctccttc tttctccatg 240  
ttcatcagaa tttatctccc tagatctcac tcagtgattt cgagtgcctg ctctgatacc 300  
aattgaaatt ctgatatcaa t 321

<210> 5631  
<211> 311  
<212> DNA  
<213> Glycine max

<400> 5631

tataatatat cgatacgtc gaaattaaac atcgggaact ctcgagaaat tcaatttgc 60  
atcatttttc acacggatgt ccgattcggg cgcataatat gtcgagaggc tcgaaattga 120  
acaacggaag ctcttgagaa attcaactgg tataactttt cacacggatg ttcgatttag 180  
gcaaatcaca tatcgagacg ctcaaaattg aacaacggaa gtcctaaga aattcaaattg 240  
gtcataactt ttcactcgaa tgtccaatac aggcgtatca cctatagtga cactcgaaat 300

tgaacaacgg a

311

<210> 5632  
<211> 354  
<212> DNA  
<213> Glycine max  
  
<400> 5632

agcttcaatc ggacattcgt gtgtttaagt tatgaccatt tgaatttctg aagagcttcc 60  
gttgttcaat tttgagcctc tcgacatatt atgcgcccga atcggacatc cgtgtgaaaa 120  
gttatgacca tttgaatttc tcaagagttt tcgatgttta atttcgagcg tatcgatata 180  
ttataagccc ggatcggaac tcagtgtgaa aagttatgac catttgaatt tcacgagagc 240  
ttccgttggtg catttacgag cgtctctata tgtgatacgc ctgaatcgga catccgagtg 300  
aaaagttatg accatttgaa tgtctcgaga gctttcgttg tcaattttga gcgt 354

<210> 5633  
<211> 281  
<212> DNA  
<213> Glycine max  
  
<400> 5633

tggcttagaa ctttctgctt ttattaggag gtttttttgc atttgatatt tggggtaatg 60  
cagacatgga gtaacttcta aaatggctgc caaaggaaaa taattgagag ccaagtgatg 120  
ctgaataatt ggacctctga gaagtgttac cgatacctga attcaaagaa aattgaggag 180  
gagataaccg gcgggttaca tgggggagag cgttatctaa tggaagtatc catttaataa 240  
tgctccacat ggatcctgat ttgtgtgaaa ctgaatgttc t 281

<210> 5634  
<211> 363  
<212> DNA  
<213> Glycine max  
  
<400> 5634

agcttctaaa ctttgtacaa gaattaagct ctgataccac ttgttagaca agtggcctca 60  
gatatcttaa gaaggggggg gttgaattaa gatattcgaa actttttccc ctaattaaaa 120  
atctatctta ctttttactt aagttatgaa ttcccttaat gacaatcttc ttaaataatta 180

attcaaatga agcaacttga atataaatat aaagcaataa taaataaagg agattaaggg 240  
aagagaaaat gcaaactcag ttttatactg gttcggccac atccttgtgc ctacgtccag 300  
tccccagca acccgcttga gagttccact aacttgtaaa ttccttttac aagttctaaa 360  
cac 363

<210> 5635  
<211> 316  
<212> DNA  
<213> Glycine max

<400> 5635

ttggaaaatg atttctatac aaaagttagt cgtataaagt gactaacact tatctatgaa 60  
agtttttttag agagttttttt agaattttat tgtcttattc tctcaaaagc aaatcattgg 120  
ccaaacactt gcaagtcaat taacgattct tctaagaact tcaacttgta tcattcttct 180  
ctaaaagaga gaaaaacttt tgtacttcta aaacaaaatt gttgtgatca agaggctgtg 240  
tgtctcttga attgtgagtt tcttgaacac aagggaatgg atccctcagt tgttcaaaag 300  
tttgaaatgg atttta 316

<210> 5636  
<211> 324  
<212> DNA  
<213> Glycine max

<400> 5636

tgtagggtta aagtctcacg attgtcacgt gctcatgcaa caattgtag ccgtggctat 60  
acgagacatc ttgccaaaca aagtcaggtt aacgataact cgtctatgct ttttcttcca 120  
ttctatatgt agcaaagtca ttgatccagt catgtttgat gagttggaaa atgaggccgc 180  
aattatactg ggccagttgg agatggattt tccccctggc ttcgttgacc tcatgaatca 240  
cttgaatggg cctctggtcc gagaaaataa atgatggggg cctgtttatt aacgggtggat 300  
gtaccagtt gagcgatata tgaa 324

<210> 5637  
<211> 369  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5637

cttgaagcca aaaggaaaaa ttatcttgtt tttgttcaat gtactctgca taatagagtg 60  
tgttcaatgc aaagttacca ctccattcca tcgaaccttg aggattgata aagccatcaa 120  
gataagtctt cattaaaatt gatcttgaat attgcttcca tggctcttga agataaatcc 180  
taaccggggtt ttgaaacaac aatattccaa aaagttcctc gcatatcgcg atggatgctt 240  
catagaatca aaanccnctn nannnaanct cnccggaaaa tcacttgaag agggcctaan 300  
gacnngcat ccatcgcttt atattacagt tgaatttcca atcaaaagta tgaccattg 360  
tgtcaaaca 369

<210> 5638  
<211> 316  
<212> DNA  
<213> Glycine max

<400> 5638  
tgtaatcgat tacacacata ctgtaatcga ttaccatagg agattttcag aaaatattct 60  
caacagtcac atctttttgt gtgggtcttg aatggctatc aaaggcctat atatatgtga 120  
cttgagacac gaatttgaca agagtttttc agaacaaaaa ggtcttatgc tcttagaaag 180  
aaaaataatt ttatcctctt acaaattcct tggccaaaac tcttgtgatt caataaggaa 240  
ttatttgagt gctcaaattg ttcaatctat ctttttatag agagatttct tcttctcttc 300  
ttcttcattc tgaaaa 316

<210> 5639  
<211> 314  
<212> DNA  
<213> Glycine max

<400> 5639  
tatagttatt ggaggggagaa taaaacaatt caaatcaat tgtacctttc aagtaacgaa 60  
gaattctttt tgccgctttt agatgaggag aggtaggagc ctccgtaaag cgacacacaa 120  
ctcccaccga atatagaata ttgggccttg tattgggttag ataccttaaa ctcccacaa 180  
gactcttgaa gaccgtggag tctaccttct ctccttcac aaactttgat aacttcaagc 240

caccttccat aggtgtgttc acgggattgc aatcaagcat attaaatttc ttcaacactt 300  
cttttgtgta gctt 314

<210> 5640  
<211> 305  
<212> DNA  
<213> Glycine max

<400> 5640

tggacaatgg cagtgcaatc ttactaaaat cctggatgaa tctcctataa aaacctacat 60  
gtccaagaaa agaacgcatt tcttgcatag aagcgaggta aggtagagaa gtaataacat 120  
caatcttggc cttatcgacc tcaatacctc taatagatac caaatgccct aagattatat 180  
gtaaccacat ggtacaaaaa ctattgttaa gagtaaagac cttcccgtg gcctttggac 240  
gtctagtttg gtcattcaga cccccacat tctgcttctt cttgggatat aggcaatctc 300  
tttga 305

<210> 5641  
<211> 312  
<212> DNA  
<213> Glycine max

<400> 5641

tcaacattca atttcgagcg tctcgatata ttatcaggac tcaatcagac atccgagtaa 60  
aaagttattg ccgtttgaat tggtcagag cttcaacatt caatttcgag cgtctcgata 120  
tatgacagga ctcaatcaga catccgagta aaaagttatt gtcgtttgaa tttgctcaga 180  
gcttcaacat tcaatttcga gcgtgtcgat atattacggg cctcaatcag acatccgagt 240  
aaaaagatat tgctgtttga attggctcag agcttcaca ttcaatttcg agcgtctcga 300  
tatattacgg gc 312

<210> 5642  
<211> 363  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5642

agcntnaagg aaattcaaac gactataact ttttactcgg atgtctgatg gagtctcgta 60

atatatcgag acgctcgaaa ttgaatgttg aagctctgag ccaattcaaa cgacaataac 120  
 tttttactcg gatgtctgat tgactctcgt cacacatcga gacgctcgaa attgaatgtt 180  
 gaagctctga gccaatcaaa acgacaataa ctttttactc ggacgtctga ttgagtcctg 240  
 tcatatatcg agacactcga aattgaatgt tgatgctgtg agcaaattca aacgacaata 300  
 actttttact cggatgtctg attgagtcct gtcatatatc gagacgctcg aaattgaatg 360  
 ttg 363

<210> 5643  
 <211> 324  
 <212> DNA  
 <213> Glycine max

<400> 5643  
 tctctgcatg atgaattgcc aaaatggatg gatccatgct tattgatttc ttttctgtgt 60  
 atgtgacagg gggggaaaag gagtgatggg cgaacacctg acggaatacg tccaattaac 120  
 tcgagatgtg gcctattacc tagagcacat ggaagtactc tttttacaag aggcgagaca 180  
 caggtctgag ccaactttat ttgttttcca gtttatgctt ttgatgatat ctgttggtgt 240  
 ctatatatgc ttatgcaagt cacattatct cttttctgtg tttgttagtt ttattagaag 300  
 ggagatagaa tgatcaaaca caaa 324

<210> 5644  
 <211> 314  
 <212> DNA  
 <213> Glycine max

<400> 5644  
 tagcacctgg aattcggatg ctccatcaac ctacctatcg atgatgggta gagggatatgt 60  
 gtctttgggg cagccctgtg ttagatcagt gtagttgggtg cacattcgcc atttttcggt 120  
 ggctagctag gtggaaaacc tgacctctct tatgaaattt gcatggagga gcttgctcgac 180  
 ttcttctttg atgactttat gccgctcttc acccatcttc attttctttt gtgatatagg 240  
 tttgtcttta gaaggttttc ctatacaaga tgtaaacaaa actgccttgg ttgatgagga 300  
 ccctagacac catg 314

<210> 5645  
 <211> 314  
 <212> DNA  
 <213> Glycine max

<400> 5645

tagcacctgg aattcggatg cttcatcaac cttcctatcg atgatgggta gagggatatgt 60  
 gtctttgggg cacgccctgt ttagatcagt gtagttgggtg cacattcgcc atttttcggt 120  
 ggctagctag gtggaaaacc tgacctctct tatgaaattt gcatggagga gcttgtcgac 180  
 ttcttctttg atgactttat gccgctcttc acccatcttc attttctttt gtgatatagg 240  
 tttgtcttta gaaggttttc ctatacaaga tgtaaacaaa actgccttgg ttgatgagga 300  
 ccctagacac catg 314

<210> 5646  
 <211> 311  
 <212> DNA  
 <213> Glycine max

<400> 5646

tgtcagccgc gattgacgaa ggatgcagaa gacgacgtta gtctctgcgt gctatcaggc 60  
 ttttcatctt acagacagca aaagaaagtt tatacggata accactcggg tatttccacc 120  
 cgtcaacgtg actcaaagt cagtatgaca gatcttgtga aggtggccga caaaagcgag 180  
 gctcttgctc ctacgtatcc tccaatgagg aactcagacc tacgtagttc ttgataactt 240  
 gtgagacttg aaaaagtctc caccggaaga tgctgacatc tccggaagg gcgcagatga 300  
 ccacattggc c 311

<210> 5647  
 <211> 352  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5647

agcttgtaag agtgcatttg ttttttcttg caggccattg ataggattgg gtggttgctt 60  
 tctaaaagga gaatttggtg ggcaattggt gactgctgta ggtaaagatg gaaacaatca 120  
 aatgtttcct attgcctatg gtatagtgga atctgaaaat tattcatctt ggaagtgggt 180



tattgatcta ttgatagctg acctagatgg tattcaggag ggatcttagg ctttcatttc 240  
 taaccancan aagggaaana cttattggaa ctaacatgaa ctatggcttt cattcaattg 300  
 gtccactatt ttttgcaggg tttgggtgaa gtaatcaaag agcatggtga aa 352

<210> 5648  
 <211> 347  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5648

catatgaata atactccaat gggtggggtt agcaaaaatg attaattttt catagataaa 60  
 ataaggtttg aatatttggt tcgaaagatg ttaatattaa tttagtgtga gaataagatt 120  
 atgtttgata aaactagtta aaaagataat tagaaatagt aaaaactaat tgatagttga 180  
 aaaatgaatn tttttttatt cgtgaaaagt tatcttattg aatcatatac aaatgtttgg 240  
 taaaattata tgttgaaata gctaacaaat ataaaaatat ataaatgaac atgtttatat 300  
 aatgttttta tacatatttn taattcgatt tgttgataaa aaaatat 347

<210> 5649  
 <211> 368  
 <212> DNA  
 <213> Glycine max

<400> 5649

acatagacac ctagttagac ttttgggtta ctgtgtggtt ttagacgaaa tgatgctacc 60  
 atatgaatat atgcctaata gaagcttgga tgctttcata tttggtaaga ctatttcttg 120  
 catttgaaat attctgttgg ctaagcactt tttgtacac tcaaaatcct attttgaagt 180  
 agactaatgt aatgtgtcat gccctaatag aactacaaga ccggaagctg tgtgttctat 240  
 tagactgcga tgtgcgcttc aagaatatta tggggattgc tcgatggctt ctttatctac 300  
 atgaagaatc tacgttgagg attattcatt gggacttgaa tacaagcaac attctacctt 360  
 atgtatag 368

<210> 5650  
 <211> 358  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5650

ctaagctgaa tcgacctcag tgtgnaagna tgacttctga tattegttag ctncngngat 60  
caatntctag cgtctgtata tgtgatacgc ctgaatcgaa catccgtggg aaaagttatg 120  
accatttgaa tntctcgaaa gctttcttgg tacaatttcg agcatctcga catattgtgt 180  
gcccgaatct gaccatcggg gaaaagttat gaccatttga atatctccag agcattcatt 240  
gtgaagtttc gagcgactcg atatattata agcatgaatc ggaccttagc tgaaaacggt 300  
ctgaccatta gaatttctca gagctctcgt tgtaaaattt gagcgctctc atatatta 358

<210> 5651  
<211> 437  
<212> DNA  
<213> Glycine max

<400> 5651

aatcctgact caccataaac gttgacccaa ggttttattg cctattctta tcctcggaag 60  
caagaaaaga tgtgaagaaa attttcaatc aaaggaaaaa ggagaagaaa atttccaatc 120  
aaagaacaag agaatgataa ttctcaatca aaggaaaaaa aggaagcaaa gaaattccca 180  
atcaaagagt gggagaaaga ataaatgaaa agaaaggaaa ttccaacca aataatggga 240  
gaaatgtaaa aagaagaatg ctctgatcg aaagataaca gaagacatgt gcagagaggt 300  
ctttggaccg gacaatatct gaacaatata gaattgtcac caaatgaacg aaaaatgaag 360  
gaaatgaaac cactacctaa tatggtcttc tccacttaat taccaaccaa aatcccgtgc 420  
gctagctacc cttttttt 437

<210> 5652  
<211> 401  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5652

tcgcacttga taacggagaa cacatgaaca tgttgctggc attttcattc atggcgctcc 60  
ggacaaacgt ggagtatgga tgattgccta gagggaccgc acttatgcta tcatgaagct 120  
catctccaaa cttgaaagtg gacgacacat gaacaaccct aagcaataaa ctttcatgtg 180

gctccgaaag aagatgagaa tggacgatng ccttgagggt ccactcttag gcaatcatga 240  
aactcatctc caaactcgaa agtggaggac acatgaacag tcctaagcat atacattcat 300  
gttgctcctg aaaaggataa aatggacgat tgtcttgagg gtcctcttat aggcaatcat 360  
gaaactcatc tcccaacttc aaagtggagg acacatgaac a 401

<210> 5653  
<211> 446  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5653

tcaagctggt atctccttct tcaactacatc tagtaatacc gggttgtgtc ttctctgtgg 60  
ctgtcttact ggttttagctc tgtagtgct tagctntact gagttttaa agattggcta 120  
aaatthttgtt aaaacataag cacttagaca atgaaggaaa gctggagttg ctgcacatga 180  
tgtctaacat tatgtcaagg aatcagatcg ggctgcacaa tgcacaaggc aagataaaat 240  
gtcaaagaa gaattgaagc tgcaggatcc acgatgtcgg atacaatgtc caggacattc 300  
tgcccgaaaa tactggacac ataaatctgt tataccttta acagcttaat gtgcagtcag 360  
caacagatta tgcgatctat cnttaggaac gaattaaaag ataattaaag ttcgaattac 420  
aaacttgaat agttcgttca cggatt 446

<210> 5654  
<211> 476  
<212> DNA  
<213> Glycine max  
<400> 5654

tgtagtagat gccactctac tctaaattct tgaaagatat gttacaagg aagcataaat 60  
atattcatca ggaaaacatc atagtggaag gaaactacag tgctatgatc gaaaagatcc 120  
ttccacccaa gcataaagat cctgggagtg taactattcc ttattcaatt ggagaagtca 180  
atgtgggaaa agctcttatt gacctgtgag ccagtgtcaa ttgatgcca ctctccatgt 240  
gcagaagatt gtgggagttg gaaataatgc ccactcgaat gactttacaa ttagctgact 300  
gttcattac caggccatat ggagtaattg aagatgtgtt ggtcatagaa aaacatttta 360

tcttcctgac agactttgtg gtaatggata tctttgaaga tactgacatc cctgtaatat 420  
 tgtgaaggcc attcatgttg actgcaagct gcatagatga tatggggaag aggaag 476

<210> 5655  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5655

atcggacatc cgtgtgaaaa gttatggcca tttgaatntt acgatagtta ttgatgtata 60  
 atttcgagcg tatcgatata ttataagcct gaatcggaca tccgtgtgaa aagttatgac 120  
 catttaaatt tcacgagagc ttccgttggt caatttcgag cgtcactata tgtgatgcgc 180  
 ctaaattgga cattcgagtt aaatggtatg accatatgaa tttctcaaga gctttcgttg 240  
 ttcaattctg agcgtctaga tatgtgatgt gctcgaattg gacactcgtg tgaaaagcta 300  
 tgaccattat aatctctcaa gagctttccg tgttcaattt cgagcctctc gacatattat 360  
 ggcgccgaat ctgacatacg tgttgaaagt ttgaccattt gaatttcatg agagctt 417

<210> 5656  
 <211> 458  
 <212> DNA  
 <213> Glycine max

<400> 5656

cacgtttcaa actcaaagta tattacattt acaaacttaa ataagaaaga tcttcacatc 60  
 tataaaaaga cttaatgaac attaacagaa ataaaaccta ccagaacctg taagtgaag 120  
 aaaatataca gacccatgta aactatagaa catagatcta accttttaag tggaaaataa 180  
 cataaacgta gaagtatgca aatgaagatt taccaaataa attcagtaat agcaacttta 240  
 cctgaaagtg taaactgtta atgcagcacc caatccgcca aaacaatggg accatgatcc 300  
 tctggaactc taccatgtta ataacttcca aaatatcttc cagttcacc agaaacatca 360  
 cctctttctg actatttggt gctggccaat atttcaacaa gccgcttatt acaatgctcg 420  
 ctaactttgg ctcttctctc ataaactgca taacacag 458

<210> 5657  
 <211> 468

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5657

tactcaagct cgagcacctn cttccttacc tcttncttca ttgttgggtn ctttcttctc 60  
 tgggggttgct ggactgggtct gtagtcttct tccatcatta tcttgtgcat gcagtaggca 120  
 gggctaatac ctttaagatc cgatatatgc cacccaattg cttccttgtg tttcttcaaa 180  
 atttctacta cactcgtttc ttcacgggat gtgagtgtat tgctgatcac catatgctta 240  
 ctctcattct tctttaagaa cacatgcttc agatgggttg gacatatctt caattctacc 300  
 ttcttcttct tagatggagt cttgctcttt agtttctcaa aactggcctt ctctcatgg 360  
 atgttatctt gtcgatccaa gtcttctaag caagccttga gatcttcttc tttctcattg 420  
 ggtaggcaat ctatccgatc accatggctc tttcagctaa gtctgtgc 468

<210> 5658  
 <211> 256  
 <212> DNA  
 <213> Glycine max  
 <400> 5658

tgaacaacga taactctcga gagattaaat ggtcatcata actagtcaca ctgaagtacg 60  
 attcacgcgc atactatata gagacgctcg aaatctaacc acggacgctc tcgagaaatc 120  
 caatggatcat aacttttagc acgaaagtcc gactcagttg catgttatat cgagacactc 180  
 taaatcaaac accgagagct ctcgagaaat tcaaatgatc ataacctata acacgtaggt 240  
 catattccga cctata 256

<210> 5659  
 <211> 464  
 <212> DNA  
 <213> Glycine max  
 <400> 5659

acttctgtg tttgggaacc tctctgcct caggtgtttc taaaccaat cacctggttc 60  
 aagcacgact ttctttctgc ttttgttggc ttgccgtgca tagctcgcat ttttcttttc 120  
 aatttgaacc ttcacttgct catgcaactt cttcacatat tcagctttag cctgtgcatc 180

cttatgctta aacatagcaa tgttaggcat aggcaacaaa tcaagaggag tcaaaggatt 240  
 aaatccatac actatctcaa atggtgaaca attagttgtg ctatggacag cccgattata 300  
 agcaaactca acatgaggca aacaggcttc ccaagattta agatttttct ttaaaacagt 360  
 cctaagcagt gtgcctaaag tcctattgac tacctcagtt tgaccatcag tttgtgggtg 420  
 acaagtagta gataacatac aattagtacc aatcttacc caca 464

<210> 5660  
 <211> 462  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5660

gaatgaagct ctgataccac ttgtagaca agtggcctca gatatcttaa gaaggggggt 60  
 tgaaaaatgc aagttacaag ttcccttaaa aaatgaattc ttaaataatg attcaaataa 120  
 aacaatctga atataaatcc aaagcaataa taaataaaag agtttaaggg aagagaaagt 180  
 gcaaactcaa atttatactg gttcagccac acccttgtgc ctacgtccag tccccaaagca 240  
 acccgcttga gagtttcaat atcttgtaaa atccctttac aagttctgaa cacacaagga 300  
 caatccttcc tttgtgttca gatatcttta caacaagaga ctctcgggtct ctcaatccct 360  
 tttgagaatt tagaaagaag agaagaataa atctttcttg aaatagatag attgtacaat 420  
 ctgagcactc acataatncc ttattgaatt gcaagtgtat tg 462

<210> 5661  
 <211> 388  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5661

acatgcctca tgacacctaa gtatacttag tggagaatct tggacatgat attggattag 60  
 tgggttgaac catagctaaa attcactaat cataattagt gaaaatttgg ctccacaaat 120  
 tcaatttcaa attcaagtga aatttggata aaaattcaaa tttccctcta attatgtgtg 180  
 acacttataa atagagggtca tgcgtgttgt atttttcaac tctgatcatt tgagaattac 240  
 gctncaaagt ttagacctca tttgaggcat aaaattatgt gctccttctc cctccactca 300

tcttctccta ccttcaaact cttatccatg gcttcctatg gaggtgagat tgttcttgac 360  
tcattcttctc cttgaagtga cgtctcca 388

<210> 5662  
<211> 429  
<212> DNA  
<213> Glycine max

<400> 5662

tggcctcagc aaatacctga tttccagaat gtaattctat ctatatacct ccaatcttga 60  
atggagaggg ttaccactac tggaaaaccc gaatgcatat tttcatcgag gcaatagatc 120  
taaatatctg ggaagccata gaaatagggc cttatatacc caccacagta gaaagagtat 180  
caatagatgg tagttcatcg agtgaaagca taaccataga aaaacctaca gatagatggt 240  
ctgtagagga tagaaaacga gtacaataca acctattagc caaaaacata ataacatctg 300  
tcctatgaat ggatgaatat ttcagagttt caaattgtta gagtgctaaa gaaatgtggg 360  
acactcttcg attaacacat gaaggaacta cagatgtcta aatatcttcg ataaatgcac 420  
ttactcatg 429

<210> 5663  
<211> 468  
<212> DNA  
<213> Glycine max

<400> 5663

taagctcctt caactgcaca aggtctttat atattgatga gtatccttgt agaaccttca 60  
cccgacgaag aactgacaa aaacttatct tctccttctt ggacaaagta tggcaggctg 120  
ggggcaagta aattatcttc ccatcagacc ttggatgcaa ctatgatctg ataccatata 180  
cagttagatc ttgacgggta ttcaagccat ccttcgtctt gccttgaatg ttaaggagcg 240  
tcccaatcac actgtcacia acatttttct ccacatgcat aacatcaata caatgtctaa 300  
cgtcaagatc acaccagtac gaaagatcaa agaatatgga cctcttcttc catatgcaac 360  
tctgactttt atccttcttt tgggtcttcc caaatacagt gttcatgtgt tgaacccgct 420  
gatataccag ctcaccagtc aacggtatcg gcgcaatata atgctctt 468

<210> 5664

<211> 465  
 <212> DNA  
 <213> Glycine max

<400> 5664

gctatcccta ttgaactgcc atcatcaagc atgcttttat tcgagtttct tcatcactca 60  
 cagtataaaa cacctccaac agtgaaggga gtttttcctt attcaatatt tgaacccgaa 120  
 cccgaatatg atcgtactca tgattcaagc ccgagagaaa cttaaagatt ctctcttgct 180  
 caataaactg agccaatgca acggagtcag cattgcattt gcatgtcatc ttcaaattct 240  
 gatattggtc gaactccatc cacaagccac tcaaggtttc ataatattct gtcaccgaga 300  
 ggcttccttg cttagtcata aagatctggc tttggatctc atgacagaca atgatatcat 360  
 tctttacata gtatatgctg gcaaggttgt cacaaatttc tcgagcaccg gataaatatt 420  
 gaatgacaat ataccatgta tatagtaaatt acttcaaaaa tgatg 465

<210> 5665  
 <211> 479  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5665

tcaatctaag cttatccctt ttcactcatg tgtccaagtc tttgatgcca catgggtgac 60  
 ttattgacaa cctcagtaac tgctaccata tctcatctg caatcatgta aagagatcct 120  
 cgcttctttc cagcagccac aatgagattg gcctttgtta ccttccaagc ttcattcca 180  
 aaagtgggtg gatgtccctc atcatccaac tgccctttag atattaaata tctctttaag 240  
 gcatgaatat gtctgacatt gcgcaatgic catagggatc cactggaggt cttgatgttg 300  
 atatcacctc ttccgacaat gtcaagagaa tttccatctg caaggtaaac tntcccaaac 360  
 cttccagaaa tatagttaga caataaatct ttagaggagg tagtgtggaa cgacacacct 420  
 gagtccatga tccatgaatc aacaggacta tccannactg caaataatgc atcatcaag 479

<210> 5666  
 <211> 463  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations



<400> 5666

cataagtaag aagaaatatt actaccaatt aatagggttc tattaacctc caaaagggtg 60  
ctattgtttc tctcggctac tccattttgc taaaggaaat taggacatga tgtttgatga 120  
agaataccaa caaatttcat aaanaatttc aactcatttt tgtattatcc ctttcattat 180  
tagacctgac tatctttatt ggagtattaa attgtgtggt tatcattttg tgaaaaactt 240  
gaaaaacatt acacacatca tttttgcggt taagaaggta taaccaagtc attcttgtac 300  
aatcaccac aaatgtcaca aatcatcgca tttcattatg tgtggaaaga gggacaagtc 360  
ctcanacatc atagtgaata atatagaagg gagcataaac tttattgtta tttatagaaa 420  
aagtaacgcg atgacgtttt gtcattacac aagantcaca ttt 463

<210> 5667

<211> 392

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5667

agcttagact gagttcagcc taccatctc ttactgatga ccaaactgaa cggaccattc 60  
agtcattggg ggacctttta agagcatgtg tcttagaaca aaaaggaagc tgggagagtt 120  
ntcttcaatt gatagagttc acttataaca atagttttca ttctaccatt ggtatggctc 180  
cctatgaagc tttgtgtggt tgaagggtata gaacaccct atgttggtta gatctcggag 240  
aaggcctcac ctcaggacca gaagtgggtac aacaaaccac tgagaaagtt aagttaattc 300  
aggaaaggat gagaactgct cagagtaggc aaaaatgtta tcatgataag aggaggaaag 360  
atctggaatt cgaagttggt gatcatgtat tc 392

<210> 5668

<211> 384

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5668

ntgatgaac agttggagag gttaatggaa gaaggagatg atgcgctcca tgagaggttg 60  
gatcaaatgg agaatagaga tcataatgaa gaagaaagga ggagaagagg gaatgatgat 120

gttcctagac aaaaccgaat tgatggtatt aaactcaaca ttcctctctt taaaggaaag 180  
aatgatccag aggcctactt ggaatgggag atgaaaatag agcatgtttt ctcatgcaaa 240  
aactatgagg aggaccaaaa ggtcacgctt gccgccacgg agttttccga ctatgctctt 300  
gtgtggtgga acaagctaca aaaggagaga acaagaaatg aagagtcaat ggttgataca 360  
tgggcggaga tgaaaaggat catg 384

<210> 5669  
<211> 395  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5669

agctatgacc aggaattatt ggatggggtg gtatgtgaat tcaagttgtt cctggtgcgg 60  
agatgatggt acagcgggtg aaccagaagc tgcagtttct tttggtgagg tagccatgga 120  
aaagcagagc gtttgaatg atttcgtaaa tctcagaaaa ctattgngaa atgctggaga 180  
taacacgaat gccaagcaga tattaaattg aatgaagaat gtagaggggt gtgtgaagca 240  
acggtcgaat ttgctttgta gtgaacgtgc tattaatgtt aagtgattcg tttgggcacg 300  
ttcagatagc agtagctgct ataattcctc tagcagacaa atgccagct tgccctcagt 360  
tttcaactga tttgcatcaa gcctttggaa atatc 395

<210> 5670  
<211> 326  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5670

tgtcaaaaag ggaagcaagt taaaaactct tttgaaagta aattaaatgt ttctacttca 60  
aaacccttg aactacttca cattgatcta tttggtcctt ctagaacaat gagtttgggt 120  
ggtaattact atggcttagt tatagtagat gattactcaa ggctcatatg gactttgttt 180  
taacaaaaaa tgaagctttt ggtgcttttt aaaaacttgc caaggtgatt caaaatgaaa 240  
aaggtctcaa cattgtttca cttaaaagtg atcatagagg tgaatttcan aatgagtctt 300  
tttgaaactt ttgtggagaa aatgga 326

<210> 5671  
 <211> 387  
 <212> DNA  
 <213> Glycine max

<400> 5671

agcttatggt gcaaacattt tacaatatat ccctctcaac ctcagtagca aaatcagcca 60  
 caacatagta attatgacct ttccagcatc aggtacaatc ccgagtggag gaatcatccc 120  
 aaccttaaat aggtgaatcc ttaacaacag caacaacaac aaccttattg taaaaatggt 180  
 gttggcctaa gcagaccata cgtgcctcca ccaatctatc agcaacaaca acaacagccc 240  
 cagaaacaac aaacagttga ggcttcttcg caaccttccc ttgaagaact tgtgaggcaa 300  
 atgactatgc aaaacatgca gtttcaacaa gagaccaaag cctacattca gagcttaact 360  
 aatcagatgg gacaattggc tacacag 387

<210> 5672  
 <211> 454  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5672

ctaagctnga aaggattatg naattgacct tgagtccaag acatttacta aaatttagct 60  
 ataaatcaac taatgaaagt gctcaaaagg gtatatacaa cctccaaac ttgagcctaa 120  
 ggataaatga agtttaaagc taaataactc agaaagatat acatgtctcc aaccttgaga 180  
 cttaaagtaa ataaagctta aaattgagct acaagtaagc taaagtactt aaaaagatat 240  
 atagtaaaaa aaaatgtaag aaaattaaat gagctataat acaattaaaa tgaataatca 300  
 aaccataatt taagtctagt tatgcttttg ttattaaaaa gtantaattn tagcantttt 360  
 atatttatta aataaattat acgagtctca ttaaaataat taaagcatat ttcctagtct 420  
 ctattaacaa gatcaaataa actttttacaa tatt 454

<210> 5673  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 5673

agcttggaga caaaatcatg aaatttgggt gtcgccaatt cnttgggtgag aaaatctgcc 60  
acttgatcac ttgttgaaac tggtagtagc tttagagtgc ccttcaaaag cttctctcgc 120  
acaagatggc aatcaatttc caagtgtttt gtgcgttcgt gaaaaaccgg atttgaggca 180  
atgtggactg cgctttgggt gtcacagtaa agagtggag ttctggtaag ctgaactctc 240  
aaatctgcaa aaagatacaa cagccattgc aactcacaag cagctgaaga cagagccctg 300  
tactctgctt ctgaagatga tctggacaca gttgcttgct ttttagcacg ccatgacact 360  
aaagatttgc ctatgaagaa acaatatcca gatat 395

<210> 5674

<211> 373

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5674

agcttccatc aagtgcggac cctcaaggat atccaccatt ctccccattt ttcggagccc 60  
cataaatgtt attgcctagc gctattcatg tgtcctccac cttcgagttt ggagctatgt 120  
ntcatgattg cctaagtgcg gaccctcaag gaaatcctcc attctcccc tttttcggag 180  
cccatgaat gttattgcct aacgctgttc atgtgtcctc caccttcgag tttggagcta 240  
tgtttcatga ttgcctaagt gcggaccctc aaggcaatcc tccatcctcc ccctttttcg 300  
gagcccatg aatgttattg cctagcgtg ttcattgtgc ctccacctc gagtttggag 360  
ctatgtttca tga 373

<210> 5675

<211> 329

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5675

ttgaatagga gtggtgcgcg gngtatatgt tccatataca catctttatt gagatttcca 60  
tgaaggaata cattataaat gtcaagttgt tgcaaggacc attgatttgc tgcagcaatg 120  
gtcaaaagta acttaattgt gtttaccttt ccaattggtg aaatagtggc aaaagtagtt 180

gataccttgg gtttgagtga atccacgaag catagctttg agccaatacc tttattntat 240  
 gtttagactat ttattttaac tattatgata attaacataa taaaattata atgtctactt 300  
 aaatatatgt ttcttacttt attttaaac 329

<210> 5676  
 <211> 267  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5676

agcttgaaat tgaacaactt atgctctcta ctatntcgaa agggcatagc tttttactct 60  
 gatgtcctat tcggagacat gactcattta tacacttgaa attgacaacg gaaactctct 120  
 gaaaattctg atgtgcataa cactttcctc tcatgttctg atcgaggaca taactttatt 180  
 aaacgctcga atttgaacaa ctgaatctct cgagacatct gaatggcata acatttcact 240  
 cagatgttcg attcggggat attattt 267

<210> 5677  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5677

gcttgtagc atactctnta attgtttcga actccttcat tttctgcac tcaaattctc 60  
 taactaaatt cagggcttgc attcccttaa tcctttcatc tccttcgtat tcattcttaa 120  
 ggaaactcca gatttcatat gcctgattga tggtcattat tctagtgaat atttcttttg 180  
 agatagcagc aaataaagaa gctcttgctt ttgactntct tgttttcctc tccttttaac 240  
 tntttatctg agtcattggt ggattgggtg gtaaaggaag aacttcgtag tcttcctcaa 300  
 ccgcttccca gagatcattt gcctccaaat gtgcctccat ttttgctgcc cagatttcat 360  
 gattatcacc atcaaacat 379

<210> 5678  
 <211> 372  
 <212> DNA  
 <213> Glycine max

<400> 5678

tactcaagct tctggtggga catcttgact tgctttttat ctgacattct ttatagattc 60  
tgccctcttc tattttcaga ttgggaatgc ctctaacagc acctttgtca atgattatct 120  
tcatgcctct taagtgcaga tgtccaaatc tttgatgccca tattttgact tcatcttctt 180  
tggaagaatag acatgtggag gagtaactgg tttcttgagg tgtccatagg taacagttgt 240  
cctttgatct gctgcccttc attaagactt cactcttctc atttgtcacc aagcattctg 300  
actttgtgaa gtttacattg aatccttcat cacacaactg actgatgctg atcaagttcg 360  
cagtcagtcc ct 372

<210> 5679

<211> 400

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5679

agcttcttcc ccctttccct aatgtctaata tttttcacat agnttatgag cttatgcaaa 60  
tataataatt gcatccttta actataaaca ggacaaaagt atcccttttac atttgacaag 120  
gtattaaatc atgaggcatc tcagcaagat gtttactga gatatcaciaa ttggtacaaa 180  
gtgcgcttga tgggtacaag gcgattatta atttgtgtct tctttgttca agttaccttt 240  
tgcagggtcaa aaatctctta cattggatac aactattggt atgtgacaat tattattttc 300  
tgagaagcag tggctactgg ttgatcattg ggcgaattc ttgtatgtaa tatactagag 360  
tattaatatt aatatacaca tctttaactt tctcgattat 400

<210> 5680

<211> 399

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5680

tcgaaagaga cattccaagt ggttgggaatt catttagatg ttttcttata tgatcaagta 60  
caagaatggt aaggaaaaca tagtggttga tgctttatct agaaggatg ttttcttac 120  
ttctttgcaa actaaattgc ttggttttga gtttatgaag gacttgtatg ctaatgattc 180

tgaatttggc aaagtatggg attcttgtct taaacatggt tttaggaact attatagatg 240  
 ttcatgtttc aaaaaaaaaa gttgtgtgtg tctgtgttcc ttgcatgaaa tgtagtttg 300  
 agaaatcatg gtggtggaat gatgggacat tntggtgtga aaaagacttt ataaattctg 360  
 gataagccat tttattagcc tagcatgaag catgatgtg 399

<210> 5681  
 <211> 412  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5681

agcttagact gagttcagcc tactatcttc taactgatgg ccaaactgaa cggaccattc 60  
 agtcgttggg ggacctttta agagcatgtg tcttagagca gaagggaagt tgggagagtt 120  
 ctcttccatt gatagagttc acttataaca acaattttca ttccaccatt ggcattggctc 180  
 cctatgaagc tttgtatggt agaagatgta naacaccct atgttggtta gagctcggag 240  
 aaggcctcac cttatgacca gaagtggtag aacaaaccac tgagaaagt aagttaattc 300  
 aggaaaggat gagaactgct taaagttggc aggaaagtta tcatgataag aggaggaaag 360  
 atctggaatt cgaagttggt gatcatgtat tcttgagagt cacttcattg ac 412

<210> 5682  
 <211> 385  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5682

cactctgaaa ctcagctatt cagatgctac tgacaaaggc agtggttttg gttttttcag 60  
 cggncattc tgctgccccg ggataacaag ggctaatagc tacaacagta ggactaacat 120  
 gcttaacagt aaacagaaca cagccaggtg atgttgagc acaagagaag gccacaatct 180  
 ggtatgtcat ctcacatctt ggcagtttga tcagctcccg agtaaaggga taaagaagaa 240  
 tactcgtgta gttctgggcc ggtatagcaa taaccaacca tcttttgtat acaaactct 300  
 agatccattc aactctggcg actcgaagg gagtgtctta tgctgcacag ggtcatagaa 360  
 ttcataacag gcaccgaatt ttgga 385

<210> 5683  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5683

agcttaagct ccttcaactg tacaaggctc ttattatttg aagagtatcc ttgnggaacc 60  
 ttcacccgac aaagacactg acaaaaactt atcttctcct ttttggacaa agtatgacaa 120  
 gctgggggcg aataaatttt cttcccatct gaccttggat gcaactgtga tcatatgccc 180  
 atctcagcta gatcatgacg ggtattcgag ccatecttcg tcttgccttg aatgttaacg 240  
 agcgtaccaaa tgacactgtc acatacattt ttctccacat gcataacatc aatacaatgt 300  
 ctaacgtcta gatgatacca gtgcggaaga tcaaagacaa tggacttctt cttccatatg 360  
 caagtcgtac tttta 375

<210> 5684  
 <211> 285  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5684

attgttcaat ttcgagcgtc tcttatatna cgcgctgaa tcggacgtcc gagngaaaag 60  
 ttatgaccat ttgaattcct caagagcttc cattgttcaa tttcgcgct ctcgatatat 120  
 tatgcgcctg aatcggaact ccgagtgaag agttatgacc atttaaattg ctcaagaggt 180  
 tccattgttc aatttcgagc gtctcgatat attatgcacc tgaatcggac ctccgagtgg 240  
 aaggttatga ccatttgaat tgcttaagag cttacattgt tcaat 285

<210> 5685  
 <211> 387  
 <212> DNA  
 <213> Glycine max

<400> 5685

tctcctcatt gtagcattat ttactttcgg ctctttagca ttctcaataa attggctccg 60  
 atagcccata gaaactatac aaccaatgc aattgctctg gcctctagca attcgctatt 120



tgcactcctc ctaattatat atatcccgta atttctatca ctattcatta ttttatttta 180  
 tatttaatta catgttttaa tatatcaaga gagagaatga taatttatta aattaaaaat 240  
 attttttagtg atgttatggt aaatagacta cataatatta cattttttca tcataagaga 300  
 tgaaggataa tataatattt gtatctttca cagataaaac aagtgttaatt ttttttggtt 360  
 actataaaag aatatagtat gactact 387

<210> 5686  
 <211> 381  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5686

agcttatcat tgataaaagt ttatgattta ctatttgata ctattagggg gttgntcgaa 60  
 gaacctgccc ataantaaag attccagcag aagggttaatt ctctaagttt ccatagggaa 120  
 agatggatcc ttgtgaaaac ttatctccct ctgcacattt catgacatac atgtaatctg 180  
 ttggaactag actaaatcca agctcatccc aattaatgtc agcatagntt tccccagcag 240  
 tactgatttt cagacaaaag agggtaatca aagttcagat tcanaatcac caataaaacc 300  
 aagttcatac attattatct actagtacaa taacattgtc gtactcatca aaaattaaat 360  
 accataacat tttcgtattc a 381

<210> 5687  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
  
 <400> 5687

agcttgctga tacaattatt aggggattgt ttaagtactg gcttataaca aatagtccaa 60  
 aggaggttat gttcctgggt gagttggaag aagtcttgga agcaactcaa cccccagaat 120  
 ttcagcgttg tatggagcca ttgtttcgtc gcattgcacg ttgtttgaat agccctcatt 180  
 ttcaggtttg aatttttcaa tactttcctc tggctccttt tctgtttctc ctcttatttc 240  
 atgatgaaaa tacacctgaa tttcaaatta attctctctg gcaacttcct tcatactgat 300  
 tacctgaatc ctatatctca attcaattcc tctagttgat aagttgggtt aattagcaag 360  
 aaaaggacta acctttttgc atcatcctat agctaaatgc atattggctt atggctttga 420

agtgacataa tatcaat

437

<210> 5688  
<211> 411  
<212> DNA  
<213> Glycine max

<400> 5688

agcttgaagg taaactagat gccttgggta ttctgggtat cccaactggc catgaatcaa 60  
aaatctgcac ctatcaccag actctgaggt ttatgctcct ttgccgacca ccacacagac 120  
ctttgccctt ttgggcaaca atctgaagca attgaacagc ctgaagctta tgttgcaaac 180  
atctacaaca gacctcctca acctcaacag caaaatcagc cacaacagaa taactatgac 240  
ctttccagca acaggtacaa tcccggatgg aggaatcatc ccaaccttat atggtcgaat 300  
ccttcacaac agcagcagca acaacaatag acttattctc aaaatgctgc tggcccaagc 360  
agaccataca ttccttcacc aatccagcat caacaacaac aacaacaacc c 411

<210> 5689  
<211> 447  
<212> DNA  
<213> Glycine max

<400> 5689

agcttccatc aactgcagct gcccaaactt ttctagtatt caattacaac atattataat 60  
cgattacaga ggcttgttct atggtaatcg attacagga gtagtaatcg attaccagac 120  
cctaaaacat ggatttttca ttaaaactaa ctatttttca cccacaaaaa catacacatt 180  
tagtataaat aatgaaaata tacaataata aaaaaacaag tatcaaaagc aatcaataat 240  
catcataact ctcaaacaca ttcattcaaag acaatccaaa tttcaagatc aaacaacaat 300  
taacaatcat cataactctc aaacacattc atcaaagcaa tcaaaatttc aagaacaaac 360  
aacaatcaac aatcatcata actatcaaac ataattatca aagacaatcg aaactcaagc 420  
gaaaacaatc attaaacctc aatcaac 447

<210> 5690  
<211> 399  
<212> DNA  
<213> Glycine max

<400> 5690

agcttggtta tctccttctt cactacatca ttattcaccg ggttgagtct tctttgtggc 60  
tgtcttactg gtttagctcc atcctctaaa tttattcgat gcatacatgt ggatgggcta 120  
ataccaggaa tgtccgccag ggtccagcct atagccttct tatgcttctt gagaactgac 180  
aacaacttct cctcttgctc atcagcaagg gaggcagata taatcactgg aaaactcttg 240  
ctatcatcca agtaagcata ttttaaattt gatggcagag gcttcaattc tgggtgtggtc 300  
ggctggacag tgggtgaagg agatggtttc tcagccttta cctcataaag aaagtcagag 360  
gtatgtgtac ttctgaaac attggtagtc ctatctgac 399

<210> 5691

<211> 393

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5691

ngccgccacg gagttttcct actatgctct tgtgtggtgg ttcaagctac aatttgagag 60  
agcaagaaat gaagagccaa tgggtgatac atggacggag atgaaaaaga tcatgaggaa 120  
gcggtatgtg ccggctagtt actcaaggga cttgaaattc aagctccaaa aactaaccba 180  
aggcaacaag ggggttgagg agtatttcaa ggaaatggat gtgctcatga ttcaagcaaa 240  
tattgaagaa gatgaggagg taactatggc tcgatttctt aatggtttga ctaatgatat 300  
ccgtgatatt gttgagctgc aggagtttgt tgaaatggat gaattgcttc acaaagcaat 360  
ccaagtggag caacaattaa aaaggaaggg agt 393

<210> 5692

<211> 345

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5692

atagaagact ccaagaagaa tgggtcagag atgcaagaga aggccctatg gttctcatga 60  
gccttagggg agatttcggg cccatgggct aagtatgagc ctgcttatct ttgtacatat 120  
tatattaagg tttcattatt ttttggccat gtatttaggg ctccataata tagataagat 180

accctagaaa tgtaggattt ttcagccctt gtattntang gcacctcaac tagattttgt 240  
 attaagggtg gttntttaat ttcacatgca ttaagtgatt atttgatgtg ntgtggtgga 300  
 aaataaatta aatgaattgg gagaagtcca atccaattaa atttt 345

<210> 5693  
 <211> 391  
 <212> DNA  
 <213> Glycine max  
 <400> 5693

agcttgaagg taaactagat gccttggtta ttctggtaac ccagctggcc ttgaatcaga 60  
 aatttgtacc tgctgcaaga gtctgtggtt tatgctcccc taccgaccac catacagacc 120  
 tttgcccttc tatgtagcaa cctggagcaa ttgagcagcc tgaagcttat gctgcaaaca 180  
 tttaaatag acctcctcaa cctcagcagc agaatcaggc acaacacaac aattatgaca 240  
 actccagcaa caggtacaat cccaggtgga ggaatcatcc caaccttatg tggctcgagtc 300  
 cttcacaaca gcagcagtag caacaacgac aaccttatgt tcagagatgt gctggcccaa 360  
 gcagaccatg cgttcctcca ccaatccagc a 391

<210> 5694  
 <211> 384  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5694

ntgatgcaac attnggagag gttaatgttt caacaagatg ttgcgctcca tgagaggttg 60  
 gatcaaatgg agaatagaga tcataatgaa gaagaaagga ggagaagagg gaatgatggt 120  
 gttcctagac aaaaccgaat tgatggtatt aaactcaaca ttcctccatt taaaggaaag 180  
 aatgatccgg aggctactt ggagtgggag atganaatag agcatgtnt ctcagcaac 240  
 aactatgagg aggaccagaa ggtgaagctt gccgccacgg agttttccga ctatgctctt 300  
 gtgtggtgga acaagctaca aaaggagaga gcaagaaatg aagagccaat ggttgataca 360  
 tggacagaga tgaaaaagat catg 384

<210> 5695

<211> 343  
 <212> DNA  
 <213> Glycine max

<400> 5695

agcttgacaa ggagccatac caatacaggc ctggtagctt ttgtccgaag caaactcaag 60  
 caatggcgaa caatccatcc agctaccttg ttgctctata atacacgccc gaagtagatc 120  
 ctctagagtc tgaatagttc gctcagtcctg accatctggt tgaggatgat aagctgaact 180  
 aagcttcagc tttgtcccca aggcttcatg tagacttgtc caaaatcgcg aagtgaacct 240  
 tggatccctg tcagatacaa tactagaagg aattccatgc aaccttacta cttccttgat 300  
 atacaactcc actaactggt ccattctata cctcatattc act 343

<210> 5696  
 <211> 341  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5696

tctacattca atttcgagct tttcgattat tacgggactt aatcggacat ccgagtaaaa 60  
 agttattgta gtttgaattt gctcanggct tcggtattcc atttcgagcg tctcgatata 120  
 ttacgggact caatcggaca tccgagtaaa aagctattgt cgtgtgaata ttctcagagc 180  
 ttctgaattc catttcgagc atctcgatat attacgggac tcaatcagac atccgagtag 240  
 aaagttattg tcgtttgaat ttgctcacag cttcagtatt ccatttcgag cgtctcgatg 300  
 tattacggga ctcaatcaga catccgagta aaaagttatt g 341

<210> 5697  
 <211> 350  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5697

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 gcgcaaaatc tctagaacta cgaagaagtt gtccatcatc tttttgctct taatgaaagc 120  
 agcttgactg tccctaatta tcgtctcaag cactgtggct atgtgggttag ccagaatntt 180

aaatacaatc ctgtataaca aattaccgcc tgatattggt ctaaaatggt taacctgtga 240  
 ggcctgatca tgcttaagaa taagcccact aatagcatgg ttgaactgct ttataattta 300  
 tccagttgta aacatttcat taaccgctgc atagatatta ccaccaatga 350

<210> 5698  
 <211> 380  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5698

tgttgctcga tatctntagc tctttgagtc cncngagaa ttnggttntc cttcttcttc 60  
 ttcttcttat atgggatccc tctagccttt tgctgacact tcttgacctc acgcaggtag 120  
 acccgaatgg ctccctcctcc aaagggatta gtctctggcg atccgccatg ctccctcatan 180  
 gcagcgcgaa accggcctat gagggcatcg aggctacccc atgcttgccct gagagggcan 240  
 gcacanggtg cangaggggt gggctggcca aagaagatgc aaccgtgcaa gtggaccttg 300  
 gttttccaaa ttgatcgagg taccgaagga aatccaacac atggttgaag ttgcaactgag 360  
 agagtggaac tgggggactc 380

<210> 5699  
 <211> 429  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5699

ntaagcaaat tcaaatgaca ataactnttg actcggatgt tctattgagt catttaataa 60  
 ttcttgacgc taganattga atacagaagc tctcaccaa tttaaattgac aataactttt 120  
 tactcagaag tctgattgtg tcccgttaata tatctagatg ctcaaaattg aaaacagaag 180  
 ctctgagcaa attcaaacga caatagctnt tgactcggat atccgattga gtcatttaat 240  
 aattcgagac gctcaaaatt gaatacagaa gctctaagca aattcaaattg acaataactt 300  
 ttgactcgaa tgtccgattg agtcanttta taanttgaga cgctcanaat tgaatgcagg 360  
 agctctcacc aaattttaat gacaataaac ttttactcag aagtctaatt gtgtcctgta 420  
 atttatcta 429

<210> 5700  
 <211> 318  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5700

tacaatcaag tggacataaa gtcgattcct cctgaggagg ttggtattg tctcaacacg 60  
 gatggagctt tcaaagggca aggaggtatt actggttggtg gtgggctttt taggaatata 120  
 aatgggaagt ggatttgggg tttttccaga aacttangga aagaaagtgt ctttgttgcg 180  
 agctgtgggg ttnttttttt caaaggcctc aagttgttct tcataaaggg attgataagg 240  
 ttactattca agtagattct aaagttgttg ttaaagctat aaatggcgac aaagtgggga 300  
 attttngttg gtggatat 318

<210> 5701  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5701

tgannatgaa caacggattc tctcgagana atctagtgtt tataaatntt cacacagatg 60  
 tccgattcgg ggaaataata tatcgagacg caggaattg aacaacggaa gctctcgaga 120  
 aatttgaatg gtcataacat ttactcgga tgttcgatcc ggggacataa tttatcgaga 180  
 cgctcgaaat tgaacaaccg aagctctcga caaattagaa tggtcgtaac ttttcacgcg 240  
 aatgttcgat tcggggacat aactcatcta gacgctcgaa attgaacaac ggaagctctc 300  
 gagaaatttg aatggtcata agttttcaca cggatgtccg attcgggaaac ataatatatc 360  
 aagacgatcg anatngaaca acggaagctc tcgagaaaat cgaatggtca taacgtttca 420  
 cacagatgnt ccgatcgggg acat 444

<210> 5702  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5702

ttccttttca ggtccattga ctaataaacc agtattagta aacttgtttc tggagggttt 60  
ccacgtttac cagtggccca cacttcatct ccaatagcat ctactaatgc ttcacctccc 120  
ctggttgctt caccaggat aagtgaactt catgaacttc ctagacctcc tggtaatcaa 180  
tctagcaagc cacgagcggg tcaactctgct ccattagtat taaaaaatcc aaaagctgcc 240  
atgactaata aatttccttc agttgtattt agtgcagcat ctccactctc aactccacct 300  
gtctctcgga gtttctctat accttctagt ggtcagagag ttgtggcatt aaatgtctct 360  
tatactaacg tattggatac tcnccaagat tcaaagggtg aataagacgt gtcaacctca 420  
ctaacacca tgtcgcagag agcatcta atatac 455

<210> 5703  
<211> 449  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5703

gttcttcttc aaaactgtcc taagcaaagt tcccaaagtc ctattaacaa cttccgtttg 60  
cccatcggtt tgtgggtgac aagtgggtga aaataacaat ttattgcca acttgctcca 120  
caaagtcctc caaaaatggc ttaggaactt agagtcctta tctaatacaa tgctccttgg 180  
caaaccatgg agtctcacia tctccttgaa aaacaaatca accacatggg aagcatcatc 240  
aactntctta catggaataa aatgagccat tttagaaaac ctatcaacaa ccacaaaaat 300  
ggaatctcta ccattgcttg tttttggcag ccncacaaca aaatccatgg ataaatcaat 360  
ccaaggatac tccggaattg gcaatggagt atacaatcca tgaggctcta ccttagactt 420  
ttgcctttta catacaatgc aatgttcac 449

<210> 5704  
<211> 435  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5704

agcttcacaa agagaatcat ctagatataa cataacttga agatctctta cgaggctatg 60  
cttttcaagc tttaagatta acctcaagct agcatgacca agcttctcat gccatgcccc 120



atgatgctct ntgactgaga gtaagcatga cactttttta ctggatagat caccaagttt 180  
aatcttatag agatttcctt gtctcttagc agagaagagt gaagacctat ccttgtgttg 240  
gactatacac atacccttaa taaaggtgac attatatcca ctatcacata attaaacttat 300  
gcttagtaga ttatgcttca atcctttaac aagcaacaca ttttcaatat gaggatagag 360  
agggatacaa atcttactga cactagttat tcaaattctt tgattccctc caaaagtgat 420  
cgccccatca gacat 435

<210> 5705  
<211> 445  
<212> DNA  
<213> Glycine max

<400> 5705  
agcttcctat gctcattgga gagtctgaga ttcttgacc ttatctcaag tgggttcattg 60  
ggattaattc ctcatcaact aggaaacctc tcagacctgc agcaccttag tgctggatac 120  
aattatgctc ttcagataga caaccttaat tggatgtcaa ggctatcttc cttagagtac 180  
cttgatttga gtgggttcaga ccttcataaa caatggaact ggcttcaagt acagagtgc 240  
cttccatctc tttcataact acacttggag agctgtctaa tcgataactt aggaccacca 300  
aaatgaaaag ccaactctac acatctccaa gtgcttgatc tttcaattaa cagtctcaat 360  
caccaaaacc attcatggct atttaatctc agcacaactc tctgtcaact tgatttacac 420  
agtatccttt ctgagggaca gtgat 445

<210> 5706  
<211> 488  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5706

agcttgtgca tncaataccc tgatgaggat gttccatattg ctcttaaaac tggactgac 60  
tcattgcttt caaagtttca tggccttgca ggtgaagacc cacacaagca tctgaaagaa 120  
ttccatattg tctgtccac catgaaacca ccacatgtcc aggaggatca catatttctg 180  
aaggctcttc ctcatctttt agagggagtg gcaaatgact ggctatatta ccttgtctca 240

agggtccatca cgagctgnga tgacctcaag agagtattct tagaaaaaca atctccctgc 300  
 ttccaagacc acagccatca gaanagatat ttcaggcatt agacaactca tgtgagagag 360  
 cctatatgaa tactgtgaga gatataaaaa attatgtgtt agttgccctc accaccagat 420  
 ttcatagcaa cttctcctcc aatatttgta tgaatgactc accaacaatgg agagaagtat 480  
 gatagatg 488

<210> 5707  
 <211> 442  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5707

taaaggaagt ggaagaatta gtatgggcag aaatgtctct tcactgattg gtaaatctgt 60  
 tccccaatc cctgaaaaat gtaaagatct aggtacattc agcatacctt gtattatagg 120  
 gaacaataag tttgacaatg ccatgctaga tttaggagct tctgttagtg ttatgcctct 180  
 gtctatTTTT aattctctat ctcttgggtcc cttgcagtca actgatgtgg taattcattt 240  
 agctaataga agtgttgat atcctgctgg tttcatagag gatgtcttag ttagagttcg 300  
 tgaactgatt ttccctgttg atttttatat tttgaatatg gaggagggat tctctaaagg 360  
 ctcagttccc atcattctat gcagacctt tatgaaaatn gctagaacta agatagatgt 420  
 atatgcacgc acactatcta tg 442

<210> 5708  
 <211> 485  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5708

agcttattgc atgagctata tcagggtgag tacatgccat agcatacatt attgaaccta 60  
 taatgttagc atatgtgata ctctccatat aagtatactc ttcagctctc tttggggatt 120  
 gacttacact tagtttgaat tgatcatata taggtgtcac aataggccaa cttcgaattt 180  
 gacattccaa acctttcaat aaatttattg aggtatgtct cttgagatag atacaaaatc 240  
 ttcttcttcc tatccctttt gatttccatt cccaatattc tccttgttgt cccaagtcct 300

tcatttcaaa ttccctttnt aactcanctt tgaccttggg aatttcggcc ttaccgntac 360  
 ttggtattaa catgtcatca acatatagca gtaggattac aaaggtagct ttattccttt 420  
 tgaatagcca ttttcaattg actacccttg aaccaatggg ctttttgata aactcccatg 480  
 tatatt 485

<210> 5709  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<400> 5709

taatgtgagt tgagagatca acacggcgtg ttctacacct taaaaacgtg attcaacaat 60  
 cccattgtat gagagtcttt ctgatcttt ctatagctaa ctgggtgtag gtaggattat 120  
 attattaaaa tataattcta tttttgtatt atgtatagaa acttacactt taaaaacaag 180  
 aacgagaata tcatatttat ttgaccaatg attaaatatt cattcaactt atttattatt 240  
 tttaaattaa gtatacgatt gcattaaata attagttagt ttgttacttc gcgaaaataa 300  
 aatacaaaaa ttcacaatta actataagtt tcccctacta tgtatcattg acacaatttc 360  
 aaagttccaa tttcaaatgg atgaatcatt aatcattatc aatgatgtat tatatgggaa 420  
 gtagactact tcaagtcggt ttaa 444

<210> 5710  
 <211> 424  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5710

agcttctgtn ttcaattatg agcgtctaga tatattacgg gtatcaatcg gacatccgag 60  
 caaaaagtta ttgtcatttg aattctgtgt attcattttt tagcatcaag aattattaaa 120  
 tgactcaatc ggacatccga gtaaaaagtt attgtcgttt gaatttgctg acagcttttg 180  
 tattcaattt cgagagtctc gaattattaa atgactcaat cggacatccg agtaaaaagt 240  
 tattgtcatt tgaattttct tagagctttt gatttcaatt tcgagcatct agaattatta 300  
 aaggactcaa tcggacatcc gagtaaatag ttatgggtcat tttgaattgc ttagagttac 360  
 tgttctcaat ttcgtgcgtc tcgatatact ataggactca atcggacttt acagtaaaaa 420

gtta

424

<210> 5711  
 <211> 488  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5711

catgcaagct ngaaggcatg taaccaccca tcttgtcata gtagaacact agtaatgtgt 60  
 ccactatcat tggtatcatt tccctctcca tcngtggggg tgctacttaa gctgccagat 120  
 ccctccacct ttggacgtat tctttgaaag attcatgctc ccttttgac atgttctact 180  
 actccattct atccggagcc atatcagaat tgtactaata ctgcctaata aaggcaacca 240  
 ttaggtcttt ccaagaacgg acctgagaag gtccatatt attataccag gggatggcta 300  
 cccagtaag actttcctgg aagaaatgca tcaacaattt ttcgtcttc gcgtatgcc 360  
 ccattttcct acagtacatg ttcaggtgat tcttgnggta agtagttccc ttgtacttat 420  
 cgaaatccag caccttaaac tntggagaaa tgaccacgct aggcactatg cacaactctg 480  
 ccatgtca 488

<210> 5712  
 <211> 443  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 5712

cttctcattt atgcataaca tacaagttcg tattttaatt ntatgttttag taacaagact 60  
 aaacttcata ataatatgaa agataaattt tttatttaatt acttgtagt atatatgaa 120  
 aagaaaactg ttgaaattag taatttttga ttatttttgc aacatataag aaagggtgta 180  
 tgtgtgcttt ctttagtgat acgatgttac gtgttttaatt agactaataa tgtaatgtaa 240  
 cattgaaaca tcaaattata aatattttgt ataaaaatta atggtatatt tttgttggtat 300  
 gtatttatcc agcacaaaaa tttattggat gtgttttaatt ttttgatgaat ggccctccct 360  
 gtcttctcag tctaggggtgc ccttgcaaga catcattatc caatggccgt tttaacatgt 420  
 cttaatttaa ttatttctta taa 443

<210> 5713  
 <211> 374  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5713

agcttgtgca ttcaatatcc tgttgagggt gttccatattg ttcttaagac tggactaata 60  
 catttgctgc ccaagtttca tgggtcttgca ggtgaagatc ctcttaagca tcttaaggat 120  
 ttccatattg tttgttccac catgaagccc ccagatgtcc aggaagatca tatctttcta 180  
 aaggcttttc ctcatctctt ggagggagtg tcaaaagatt ggctatacta ccttgctccc 240  
 aggtccattt ttagctggga taaccttaag aggggtgttct tggagaaatt cttccctaca 300  
 tctaagacca ctgccatcag aaaagacatt tcaggcatct ggcaacttan tggagaaagc 360  
 ttgtatgagt aatg 374

<210> 5714  
 <211> 456  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5714

agcttatggg gtgttgatgg tgcaatatta ttgtgttcaa cgaatcttag cttcatttaa 60  
 tataattaga caatgtttca tttaaataaa attttatttt tattctattc tactattgtg 120  
 aatttatttt tcattaatgt tctcactcac ggaaaatata ttatgacaat ttgatgtgaa 180  
 agtgaaaacta gtttgtcaag tttagtcaca gttaatatgg tggagctttg tagaattata 240  
 ttaggtaaac cactagcata tatgatacat gatattgtgg catgtatatt ttatatattn 300  
 tgacaagtaa aaagtacaca attgcttccc ctaatttcta ttcctcanat tataccctcc 360  
 attttcatga aattcaaaca aggtgtatta tagtatagtt ntaccgtact atcttctggt 420  
 attnttatac tntgtacaac aatagttagt acgtta 456

<210> 5715  
 <211> 469  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5715

tatctcttcc cattagtaat aagattatctt ctttctctt ttctcttggt catactgatg 60  
tatggcgctcc tgctaattgtc cttaatatct catgtgctaa atgggtttta accttcatag 120  
atgattgtac tcgagcaact tatgttttct tattaataa aaaatctgaa gtcagctttg 180  
tttttattca gtttgtgtca atgattanaa accaatttgg agtcaatatt aaaagaatta 240  
ngtctgacaa tgccaggagac tactttaatc ttgtgctaaa atcttnttgt caaaaggaag 300  
gaataatcca tgagtcttta agtggttaaca caccccaaca aaatgggatt gcagcaagga 360  
aaaatgggca cttattaaac caaactagag ccttgcttcc taaaantata tccctaanaa 420  
antatgnggg gaagccctcc ttactgcac ctacctaac aatatatta 469

<210> 5716  
<211> 484  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5716

aagccttatt cgttccctca tgaatatcca tcaactactaa aataaaaaag aattttttaa 60  
aatgggtcaa aacaatattt aacgacgggt gttgaccgtc gtagtacata tattgtaaaa 120  
agtgttaatt ttcaacgacg gataagaaaa taccctctta aaaaattgac aactttcaac 180  
gacggataag aagatattga cttagaaaac tgacaacttt ctaagacgat gtttacttag 240  
aaagacaact tattttttaat tattgatatt ttttttaaca atatcccatc ataaaaaata 300  
tgaataatta aaaataatct ttattaccat aactttaatt aatattatca taatattaat 360  
taaaatcatg acaataaatt aattaataat taaaatgta tgatcataag tcttttggaa 420  
ggtagtcaag agtaatatgt atccaacata cattaattaa aanatgaacc tccatctaata 480  
acag 484

<210> 5717  
<211> 428  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 5717

agaatcaatt catgtttcct ttgatgagtc taatgttatt tatccaagat aggatatttt 60  
agatgatatt atagaatctt tagaacaaat gcacattcat ggacaagatt ctaaaggaaa 120  
agaagaagga agcaataaag atcctccagt agaagtcaaa gcaaataatg atcttccaag 180  
agagtggaaa gcttaagaga tcatccccctt gacaacatnt ttggtgacat ctcaaaaggg 240  
gtaacaacta gacattctct taaagattta tgcaataata tggcttttgt gtctatgggt 300  
gaacctaaaa gtataaataa agccataata tattatcatt ggatagttgc tatgcaagaa 360  
aaactaaatc agtttgagag aaacaatgtg tgggaactat tataacaacc tgaatactac 420  
cccatcat 428

<210> 5718

<211> 439

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5718

catgcaagct tgacatgcta ttgaacaagc agntatatac tctgcttcac aagtagagag 60  
tgcaacaaca tcctgtttct tagagcacca ggagatggga gcacctcaa acaataaaac 120  
atgccccatt atgctttttc tgtcaagaac atctccacca cagtctgagt ctgaataagc 180  
cacaagttgt ggctcaacct tctctttcta atgtggaaat agaacaccaa agtctagtgt 240  
gctctcaagt atctcagtat ccttttagct accatcatat gtgaatgtct tggatcactc 300  
ataaacctac tgataactcc cacattgaaa gtgatttctg gtctggaatg acaaatgaat 360  
ctgagactcc caacaatttg cctatacaag gtacaatcca ctacagggtc agcttcacat 420  
ttaccaatt ngcaactca 439

<210> 5719

<211> 466

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5719

agcttctggt tagtattgat tctcggcgta ttcctttaac accttcaagt accgcttaac 60

tggatacatc caccgtaaaa agaagaacag gaccacatat ccggatctcc ctgactagat 120  
gaacaattaa gtgatccatt atgtcccaca atgatggtgg acaatacatc tccaattgac 180  
aaaggacagt gacaacctca ttctccaaat catctaatag tcaaggggca atgactgtgn 240  
tacagatagc attaaaaaga aagcacatac cagttatggc aagcctaact ttgtcaggca 300  
ggataccccg catcgctacc actcaatatt attgcattaa cacgtggcta tcatgatatt 360  
tcaagccaac caacttcata tcattgaggg ctacaacgat cttgatatta gaatagtatc 420  
cttgtgggac tctacactcc atagacattg acaaaaactc atcttc 466

<210> 5720  
<211> 353  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5720

tgcacacaag atactcctta cctaaatgca gttttaacat ctaactgccc caagtgaaga 60  
ttctctgcag ctaccatact cagaataact ctgatggtag taatctttac cactggagag 120  
aagatctctg tgaaatcaat tccttgattc tgttgaaacc ctttcactac aagtctcacc 180  
ttgtatgact ttctacgagt cagatgctta ctttagccta tagacacccc ctattttgta 240  
tcgctatctt ttcttatacc aatataatta aacaccacgt cttattcttc gtaagggatg 300  
tcatcacatc tatcattgct tgctcccact caatatacan gttcccctgc atc 353

<210> 5721  
<211> 469  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 5721

gtcacctgcg gcatgcaagc ttcattgatga tgaatcaaga tggattcatg ttgttttgat 60  
gggttcaaag atgatgacaa anatcccaag agaattgatt caagattgag tcaagaataa 120  
ttcccaagag aatgatttca agattgagtc aagaacaatt caagaatcaa gagaaatttg 180  
atttcaataa tcaagaatca aggataatca agatcaagat tcaagaatca agagaagact 240  
caatcaatat aagtactaaa aagtttttca aaacattgag tagcacatga agttttcaca 300



aaatctttta ccaaagagtt tttactctct ggtaatcgat tacagtaaac tggtaatcga 360  
 ttaccaatgg caaagtttgt tttcaaaagc tntcaactga atttacaatg ttccaattaa 420  
 tttcaaaatg gtgtaataaa ttacaagata ttggtaatcg attaccagt 469

<210> 5722  
 <211> 484  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5722

agctngctaa cccatggaag ctctaatat ctcccacact ntntggggtg ggccattctt 60  
 ggatggcctt gattttctca ggggtccactt ggacccatt tctaccaact acaaaaccta 120  
 agaaaactat attatctaca caaaaggtag acttctctat ttttgcatag aggggtgtttt 180  
 tcctaaggac tgaaagaact tgtctgagat gtcctaagt atcatctagg ctctactat 240  
 aactaaaa atcatcaaaa taaacaacta caaatctacc tatgaaatcc cttagacat 300  
 gatgcataag cctcataaag gtgcttggtg cattaatgag cccaaaaggc atcactagcc 360  
 attcatcaa accaaacttg gtcttgaaag cagtattcca ctcatcacc tttttcatcc 420  
 tgatttggtg ataaccactt ctaagatcat attttgaaaa gatattggca ccatgcaact 480  
 catc 484

<210> 5723  
 <211> 487  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5723

tgcaagctgt ttggaacttt ggctcagaac ttagctatgc aacaaattcg gttcttccac 60  
 agttgaaaaa atttaccga gatatagtat ctagtgaagg agttccaagc agatctgtca 120  
 tcagatccaa ttgatgaact acatttttcc caggaaaaag tggctttcct gttagtactt 180  
 cagcaaagat gcaacctata ctccatatat caattgctgg tgtatactgc atcaagattt 240  
 aaaaaaagtt agacctacag aaagtgaata tgaaaactgg aaccatttta aagtgtcact 300  
 ttacaaccaa ataaaattaa aaagttcagt atgaaactat gaactaattt tagcagaagc 360

caatacacac gcatgaatcg acatttatca caacactaca acattntccc ttgatgctcc 420  
acaagaaata cagccccaca tttaacaacac ttaatgagtg aattcaatct taactaccct 480  
atagact 487

<210> 5724  
<211> 431  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5724

agcttcaaga ttctttgacc ctaccagtca tcttttatat taataaaatt atttgctaatt 60  
agttatatat ttatctaaca ctatacaata ttgattatat cattgaaata ccatacgtaa 120  
aatcataata tctatgttaa tggatcaatt tttattgcat agaaattata ttaatgaaac 180  
acgtttaact atcaatagtt ttttaacatg tgactgttaa gttnaaatag atanaattct 240  
atngcaaggg tgtccatggt gaaagaaggt ctcatcatat aaggtaaact aggtttaaaa 300  
attatattag atactaatac acgatgatat atatatatat aatagaatta tggcngatga 360  
cttacttata tttttcnntg attaccaat acaccaataa aactaatta ataaacaata 420  
tgaaatatat a 431

<210> 5725  
<211> 446  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 5725

agcttgagct tagctacaca tacctctcta atagctaagc tcacctcctt gagatgagaa 60  
gctagagctt agctacacac cccctataat agctaagctc accncatga caaanaaaca 120  
tgaaaataca aaaaaaaagt ccttactaca aagactactc aaaatgccct gaaatacaag 180  
gctaaaaccc tatactacta gaatggccaa aatacaaggc cgggatgaag gaaatactta 240  
ttctaataat taaaaagata agcgggctca tacttagccc atgggctcga aatctaccct 300  
aaggctcatg agaaccctag ggccctccct tggatctcta gccctagcgc tgttcgccta 360  
tcctccaccc tcaactctta ttcagagacc catgaatnga ttgcctagcg ctgtttatgt 420

gtcctccacc atcgagtctg gaaccc

446

<210> 5726

<211> 431

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5726

agcttggttca gaatgggtng gaagtgtcca aacatggtn ggatatcttc tccctctttc 60

atactaaaga gttcatacta acttggttaga aggctcaact tggtacattt tacctaagag 120

gacccttcat aggtaatggc taagggtgtac cacatctgtt tagcactttt gaagttgtga 180

actttggaat attcttcttg agatagagca cacaacagag catttcttgc acgagagttg 240

aaaagaaata tggacatatg ttgattcgtc cactgtccct aggtatctcg ntcttatgag 300

cgtctaaagg aatttgatta cctttctcta caacgtccca catattgatg tgagtggatt 360

caaagaaggc aatcattctt tcttccagt tgtcgtagtt ggctcccttg aacataagag 420

acttgttcac a 431

<210> 5727

<211> 443

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5727

ggcttctaca taaagagctt tgaaatctga agtttagttt tcaaagatc aaagttgaaa 60

aaaatgcaca cacatgacct ctatttatag cctaagtgtc acacaaaatt ggagggaaac 120

ttgaatttct attcaaattt cacttgaatt tgaaattgaa ttgtggagc cagccaaaat 180

tcactaatta tgattagtga attttagcta tggttcagcc cactaatcca agatcaagtc 240

caagattctc cactaagtgt gcttaggtat catgaagcat gcaaagcatg aaggacatgc 300

acaaagtgcg actatatgat gtggcatgga ggtgtagcaa gttaaattgtc acctccctct 360

ctaaaattta antggattgg gcttctcaat tcaaattaaa ttatttctca acacacacat 420

caaatatttc acttatacat gtg 443

<210> 5728

<211> 430  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5728

tcgagaagaa tggcctcagc aaattcctta tttccagaag gaaattctat caatagacca 60  
 ccaatctcta atggagaggg ttaccactac tggaaaaccc gaatgcaa atctttattgag 120  
 gcaatagact taagtatttg ggaagccata gaaatagggc catatatacc caccacagta 180  
 gaaagaatta caaaagatgg tagcacatca agtgaaagca taacaataga aaaacctaga 240  
 gatagatggt ctgaagagga tagaaaacga gttcaatata atctaaaagc caataacata 300  
 ataacatctg ccctgggaat ggatgaatat atcanggttt caaattgtaa gagtgctaaa 360  
 gaaatgtggg acactctaca gtttacacat gaaggaacta cagatgttca tagatctagg 420  
 ataaacacac 430

<210> 5729  
 <211> 442  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5729

catgcaagct tccatcaata atgtttcact cagaagtccg attcagtcgc ataatatatc 60  
 gagacgtca aaattcaaca acggaagctc tcgagaattc aagtggatcat aacttttcac 120  
 atagatgtcc gattcaagga cataatatat caatacactc gaaattgaat aatggaagct 180  
 ctcgagaatt caagtggatca tcaactnttat ctcagaagtc cgattaaggc gcataacata 240  
 tcgagattct cgaaattgaa caatggaagt tctcaagata ttcaaatggt cataactttt 300  
 cagttcgatg tccgattaag gcgcataata tatctagacg ctctatattg aacaacggaa 360  
 gctctctaga tattcaaag gtcataactt ttactcaga agttcgatta aggcgcataa 420  
 tatatcgaga cactaaaaat tg 442

<210> 5730  
 <211> 464  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 5730

agcttcttgg atgtttaatg gatcctctc tattgtatag gccatataat cgggcccata 60  
atctgtagca attcttgctc tcttacctct tcgaggctct atatctgatt ctggttgtgc 120  
aagattttca ttactaatag caggaagatg actagatgaa gtacccgcac tattccttaa 180  
tttaaaagat aatcagaaac cagattcttt ctcatctctg gagtatgcat cacatctttg 240  
agaatcaaag tctttccaga ggtaaacttc agttcaacat ctccagttcc ancacccgtn 300  
ntggtgtgag aatctccaag caacactttc ttattttcaa catttgtgta tgttgtaatc 360  
atagcacgat catagtagac atggcgagag gcgccagtgt ctaccacca tacatctgat 420  
cctgcaatga tattaatctt agttatcaca acaatgggtg actc 464

<210> 5731  
<211> 365  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5731

atactaggct ngagctcggc ttgagttgaa tacgtaaggc ttaagcttga ctcatcact 60  
gtcataagct ttttttatag gcttggctcg acttacataa aagtctgatt tggcccatga 120  
gcttatttaa aagcttgctt aaagacgtcc ttgattaatt aatcatttta aaatctagt 180  
aaatactaac taaaaaaaac ttataaaatt tcgtataagt aatgtacaaa tccaataata 240  
attgataaac aaaatcatat tgaattcaag tctgtcaagc acacagtcta taaaagaca 300  
atttaaagag catgatctta aaaaatgtat ggattatgtg ctgagcccca aagcttacaa 360  
atcta 365

<210> 5732  
<211> 429  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5732

agcttcaaga atcaagatca agattcaaga atcaagacaa gacttaatca agatgagtat 60  
gaaaaggtn tttcaaaaat tgagtagcac atggattttt ctcanaatat gtttaccaaa 120

gagtttttac tctctggtaa tgcattacca gattgttgta atcgattacc agtagcaaaa 180  
 tgaatttgaa aaagttttca aatgaattta caacgttcca attgatttca aaaaatatgt 240  
 aatcgattac aatgttttgg taatcgatta ccagtgcctt tgaacgttga aattcaaatt 300  
 caaatgtgaa gagtcacatc ctttcacata aaagctttgt gtaatcgatt acacntgatt 360  
 ggtaatcgat taccagtgat tggttatgaa taaaccanaa tatgtaactc ttcaaantgg 420  
 ttttgactt 429

<210> 5733  
 <211> 463  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5733

agcttctggt gggacatctt gactngctnt ccaatctgac attcaccaca gattctgcct 60  
 tcttctattn tcagattgng gatgcctcta acagcacctt tgtcaatgat tntcttcatg 120  
 cctctcaagt gcagatgtcc aaatctttga tgccatattc tgacttcatc ttctttggag 180  
 gatagacatg tggaggagta gctggtttct tgagggtgcc ataggtaaca attggccttt 240  
 gatctgctgc ccttcattag aacttcaactc ttctcatttg tcaccaagca ttctgactnt 300  
 gtgaagtta cattgaatcc ttcacacac aactgactga tgctgatcaa gtntgcagtc 360  
 agtcccttca ctatcagaac tttgtccaga ctatgaagtc catcatggac tagctttcct 420  
 attccaatga nttttccttt agagccatct ccaaagtca cat 463

<210> 5734  
 <211> 281  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5734

tatgggttat gcaacagaac tnagcttatt gttacaagac ttggttcatg tgctggtgaa 60  
 gcagagatta ttactgggcc caacataggt catagaacat acataccaag aatgaatctt 120  
 tctccttctg attcaccatg gccattcaag cttattagaa gacaatttcc attcatggtc 180  
 ttatttgcca tgacaattaa caaatctcaa ggacagtcga tggcacaagt tggattgttt 240

tgcccacccc agtattgtac tactgcgagt atatgttgcg c

281

<210> 5735  
<211> 468  
<212> DNA  
<213> Glycine max

<400> 5735

agcttaccat tataggaagc catggataag atcttgaagg taggagaaga tgagtggagg 60  
gagaatgagc acaaaatttt gtgtctcata tgaagtctga actttgaagt gtaattctca 120  
aatgatcaaa gttgaaaaaa tgcacacaca aggtttctat ttatagccta agtgtcacac 180  
aaaattggag gaaaatttga atttctattc aaatttcact ttgaattgaa tttgaattgg 240  
tggagcagaa tttggagcca aaatttcact aattataatt agtaaatttt agctatgggt 300  
cagcccacta atccaagatc aagtcacatc ccactaagtg tccttaggtg tcatgagaca 360  
cgtaaaacat gaaggacata caagtgtgac tatatgaagt gacaatatgg tgtagcaagc 420  
aaatgctcac ctccccctta ggatgatcca aaatttaatt ggattggg 468

<210> 5736  
<211> 459  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5736

agctngatga atcatgtatc gtagttagga acaaggctag attgattgct aaaggataca 60  
accaagagga aggcattgac tatgatgaga cctatgcctt tgggtgcaagg ttggaagcta 120  
ttangctatt gcttgctttt gggtgtatta tgaatttcag gttatatcaa atggatgtga 180  
aaagtgcctt tctcaatgga tacattgaag aagagatata tatagaccag cctccaagtt 240  
ttgtagactt tgaacatcct aatcatgttt acaagttgaa aaagacactg tgtgggttaa 300  
aagaagcacc taaattttgg tatgaaagat aaagcaattt cttaattgga cagtcttttg 360  
taagaggtca agttgacaaa acattgttta tcaagagatc atacaacgag ttcttgcttt 420  
gtgcaaatta tggtaatgac aattnttggg gtctctgat 459

<210> 5737

<211> 457  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5737

agctngaagg tttgtacatg accaaatctt tatttattcg tctgtaccta aagcagtctt 60  
 tgtattcgtt taaaatgcat gaagatagat cagtaggaga acaattggat ttgtttaata 120  
 aaatgattct agatcttgaa aatattgatg tcactattga tgatgaggat caagctctgt 180  
 tattgttggtg ctctttgcct aagagttact ctcatctcaa agagacttta ttgtttggaa 240  
 gagatactgt ttctcttgat gaagtgtagg ctgctctgaa ttcaaaggaa ttgaatgaaa 300  
 gaaaggaaaa gaagtcctct gcaagtgggtg aagggctgac agccagaggc aagaccttca 360  
 agaaagatag taaatttgat aagaagaagc aaaagccaga gcatcagaag aatggtgaag 420  
 gaaacatctt caaaatcaga tggtatcact ataaaaa 457

<210> 5738  
 <211> 373  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5738

gcttgagcca attcaaacga caataacttt ttactcggat gtctgattga gtcccgtcat 60  
 atatcgagac gctcgaaatt gaatgttgaa gctctgagcc aattcaggcg acaatatctt 120  
 ttactcggga tgtctgattg agtctgttaa tatatcgaga cgctcgaaat tgaatgttga 180  
 acctctgagc aaattcaaac gacaataact tttttctcgg atgtctgatt gagtcctgtc 240  
 atatatcgag acgctcgaaa ttgaatgttg aagctctgag ccaattcaaa cgacaataac 300  
 tttctactcg gatgtctgat tgagtctgt catatatcga gacgctcnaa attgaatggt 360  
 gaagctctga gcc 373

<210> 5739  
 <211> 316  
 <212> DNA  
 <213> Glycine max

<400> 5739





<210> 5742  
 <211> 320  
 <212> DNA  
 <213> Glycine max

<400> 5742

agctttaagg tcaagagggc tgtatgatga tacaacttgc ctcgttgtag atattattcc 60  
 ttcagatcat cccgtgttgc caacaattcc aagaaagaaa cgtaacgtgc taacttcct 120  
 tctctttgga aagaaatctc aaaactctac aaacaaaggc accaataagc tttcttctgt 180  
 tgggtgttgag gaggaattat ttgaagaggg ttctgcaatg cttacagaga ggtaactggg 240  
 accataactg ctaaatttat atttgcatag tgtcatttga agtttaattt gtcaccatca 300  
 tgggtggaaag agagaaaaaa 320

<210> 5743  
 <211> 328  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5743

agcttcgaag tttaaattggg gctattaggt cctaataatc ngngacgggt agctgttcat 60  
 aagagttagg ggtgatgaag aaagtctcgt acacaacagc agcaatagcc gagccaatta 120  
 atgggccggc ccagtagacc cagtgggttag cccatgtccc gctaacaaca gcagggtccaa 180  
 aagaaactgc tgggttcatg gatgcaccac taaaggtacc acctgccaag atgttagcac 240  
 ccacaatgaa accaattgca attggagcaa ttatcccaag tttacccttc tttgggtcca 300  
 ctgcagtggc atacactgtg taaaccaa 328

<210> 5744  
 <211> 325  
 <212> DNA  
 <213> Glycine max

<400> 5744

agcttgcccg atggattcct attcattacc cattagaaat agactagtag atagggcagc 60  
 aagaccctgc ctacttagct tcttagatgc atactcaggg tacaacaaa tacggatgca 120  
 tccacaagat gaggagaaaa caaacttcat aacctagtcg tctaactatt gctatcagat 180

tatgccattc ggcctaaaaa aggctagctc cacttaccag cacctaattg acatgatatt 240  
 caaagaacaa attggaaaga aaatggaggt atatgttgac aacatgggtg taaagtctaa 300  
 tgatgcagaa tcacacacct atgat 325

<210> 5745  
 <211> 325  
 <212> DNA  
 <213> Glycine max

<400> 5745

agcttgaaag gatgcttcaa tgttgggaata taaagagga gagaaagaga gaggggggag 60  
 cacgaaattg aaggaataaa agaggagag aagtgggaact ttgatgaatg agagtgatgc 120  
 aagctccatt ggagcttgta ggcctaggat cttcttcac aatggattcc tttgcttctt 180  
 ggaagataaa tggcagcgga atggagaagg aagagagaga ggagacgcca cttcaaggag 240  
 aagataagtc tagaagaagc tcaccaccat aggaggccat ggataaaaac ttggaggaag 300  
 aaggagatga atgaaggag gggga 325

<210> 5746  
 <211> 329  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5746

tgcttaacgt ttatcctttc atagtagnca ttttttgcac tccaatttat gatgagggaa 60  
 tcacgaacac tctctgccgt tgcaaagaaa gccttattga gctcaaactt ctctggagaa 120  
 aaagggtg tgaactcggc atggaatttg atgcttgaag caatagatgc agaactctgt 180  
 acaaattcat tgaaagtgtc tgcaagtgtt attaaagaaa gaattattaa ttaggtcctt 240  
 atttactgga aaaataaaaa caatgttgag actgtatggc taataaatct catattatta 300  
 gttcaataaa aacataaaga tgggacaaa 329

<210> 5747  
 <211> 318  
 <212> DNA  
 <213> Glycine max

<400> 5747

agctttagat acatattaat attatagact actatttgta atcaacagaa aagatcattt 60  
 gtaaaacgct tttagttaat tgcatttctc ctaaagtttt ctaattgagc cattttattc 120  
 ttttagattt cagttatatt aattgggttc ttcaaaaaaa aaaaagtcta gatcatcata 180  
 ttctatattt ttcttaaag agataattta tgggtgtccac ttgaggagtg tcctctatcc 240  
 atctaatttg atactttctt ccgcttatcg cttactctta actgtgcatt taatttatct 300  
 gctaaatata atataaat 318

<210> 5748  
 <211> 304  
 <212> DNA  
 <213> Glycine max

<400> 5748

ttcagcaaat tttaacgaca ataaattttt actttgatgt ctgattaagg cccgtaatac 60  
 atcgagacgc tcgaaattga atgttgaagc tctcagcaaa ttcaaacgac aataactttt 120  
 tactctgatg tctgattggg tcccgtaata tatcgagacg ctcgaaattg aatgttgaag 180  
 ctctcagtaa attcaaacga caataacttt ttactcggat gtctgattaa gtcccgaat 240  
 acatcgagac gctcgaaatt gaatgttgaa gctctcagca tattcaaacg acaataactt 300  
 ttta 304

<210> 5749  
 <211> 316  
 <212> DNA  
 <213> Glycine max

<400> 5749

agcttcagaa ttcaatttct agtgtctcaa tagattacgg gactcaatca gacatccgag 60  
 caaaacgtta ttgtcgtttg gattagttca gagcttcaga attcaatttc gatcgtctcg 120  
 atatattacg ggtctcaatc agacatctga ggaaaaaagt tattgtcggt tgaatttgct 180  
 gagaccttca acattcaatt ttgagcgtct cgatgtatta cgggacttta tcagacatcc 240  
 gagttaaaag ttattgttat ttgaatttac tgagagcttc aacattcaat ttcgagcgtc 300  
 tcgatatttt acggga 316

<210> 5750  
 <211> 324  
 <212> DNA  
 <213> Glycine max

<400> 5750

tatgaaatcc ttaattgttc tccatcttag caacttttat ctttctggaa ccattccaaa 60  
 gaaaattgga tcaactgcaa agcttgaaga tttggatctt ggagataacc agttgagtgg 120  
 aacaattcca atagaagtcg tgggaattacc caagttacgg aatttgaatt tgagcaataa 180  
 taaaataaat ggaagtgttc cctttgagtt tcgccaacct cttgaatctc ttgatctaag 240  
 tgggaatttg ttgagtggaa caataccaac acagcttggg gaggtgatgg gactgaaatt 300  
 gttgaatctg tctcgcaata atct 324

<210> 5751  
 <211> 292  
 <212> DNA  
 <213> Glycine max

<400> 5751

tgagccactg cttcacatta ttgaagctct cttcatctgt cacatcataa acaatctgcc 60  
 agaggaacca gttagtaaag catgcaagga tccatctaca cgggaaatca atatccaaaa 120  
 gcccatgccg agaaaatcat caccacaaat gatcccatgg gcccacgat agtagctact 180  
 ggtgattgtc ctaaactcgtt cttgcccggc tgtgtccac tacatataaa aacagatcac 240  
 aaatcaaggt aagaaaacta tatgtcaaca caatcatgac ctttggtgat cc 292

<210> 5752  
 <211> 334  
 <212> DNA  
 <213> Glycine max

<400> 5752

gcatgcaagc ttggaaagca tggaaaatgt ctctggtatt gagccatgca aattgttccc 60  
 ctcgagagtg atgctgtgaa ggcgtctgag gttggaaaat tcaggtggaa taatgccaaa 120  
 taagtgactg cgaacaatct caaggtagtg cagtccagt agattggaaa gaacgggtga 180  
 aagcagcccc actagacctt tatcgtacag gattagtcgt gtgacacggg tatggaattt 240  
 gtcacatata acacccgtga agttgcacac atgaacagct tcatcccagt tagcaagtga 300

ggaatgcggg tctgatatga ttgttttct gaat

334

<210> 5753  
<211> 343  
<212> DNA  
<213> Glycine max

<400> 5753

aataacttaag cttttgcaac tagccttgcc ttgtatcttt caatttctcc cttgggttttc 60  
ttctttgttt tgtacacca cttaacacca atagccttgt gcccttttgg aaggagacg 120  
aattcccttg tgcattctt ctgatggat ctaatttctt catgcatcg atctcatcat 180  
ttttatcttg catagcttct tcaaagttca ctggttcata atctgcaaag agacaaaata 240  
gtattatatt atccaatctc tcatttcaat cacaagatc ttggagggtt cttgtgctg 300  
acacaaccct ttcactctca atagatggca aagtgtcttc atg 343

<210> 5754  
<211> 319  
<212> DNA  
<213> Glycine max

<400> 5754

ttgaagaaat tcaaattggtc ataacttttc actttgatct ccaattcaga cgcatacat 60  
attgagacgc ttgaaattga acagcggaag ctcttgagaa atgtaaatgg tcataacttt 120  
taactcggat gtccgattca ggcgactcac atatagagac gcacgaaatt tcaatggtca 180  
taacttttca cactaagggtc cgattcaagc ttataatata tcgagatact cgaaattaaa 240  
catcggaagc tctcaagaaa ttcaattggt cataattttt caaacggatg tccgattcga 300  
gcgcataata tgtcgagac 319

<210> 5755  
<211> 322  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5755

agctttagg gttaaagncc cactattatt acgtgttcat gcaacaattg tcagccatgg 60

ctatacgaga catcttgcta aacaaagtca ggtagccat aactcgctg tgctttttct 120  
 tccatgctat attgtgccat ttggagatgt attttcccc tgctttcttt gacatcatga 180  
 ttcacttgat cgtgcatcta gtcagagaaa tcaaatgttg tggctctgtt tatctacgg 240  
 ggatgtaccc ggttgagcaa gacatgaaga tcttaatagg gtatacaaag aatatttatc 300  
 gtccagaagc atctattgtt ga 322

<210> 5756  
 <211> 329  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5756

agcttgagac atcatggnta atttgtcttc tctatgtng cacaccaaga agcgacagaa 60  
 gtaactatgt gtctctgcac ttcctttcca cactccatt ctgatgatgg gtatgtggac 120  
 agatcaacct atgttgaca ccaagttctg caagataatt ggtaaattggc ctatactctc 180  
 cccagtcag attgtacagc tttaacaggt aaattgaatt gagttttaac tagagtatga 240  
 aactgtttaa acagatcaag agtttcagat ttacttttca acaaataaag ccaagtaa 300  
 cgagtgtgag catcaacaga gggtacata 329

<210> 5757  
 <211> 327  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5757

agcttgctgc atctttaact aatgcgggtt tataaaatcg nccttggtgt agtgcataa 60  
 aatctcactt ttgcagtagt tccaattgca atctatgttt caattgaaga tcttggccc 120  
 ttcgaaatat tttcttagct tagaaatagc taaatccagc aaaggatatc cactctccta 180  
 gagaaaatac actctatctc ttttagaaga tacaagtttc ttggcatgca aaccttccaa 240  
 tcttccaatg gatcccaact tgaagctcaa tcttcatgat ggagacatac tcttgatcc 300  
 ctcagtgtat aaaagggttaa ttggtaa 327

<210> 5758

<211> 263  
 <212> DNA  
 <213> Glycine max

<400> 5758

taacaccttc ccccgcccaa cagattgtgg gtgacaagtg gttaaaaata acaattttatt 60  
 gcccaacttg ctccaaaaag tcttccaaaa atggcttagg aacttttagt ccctatcact 120  
 aacaaagctc cttggcgtac catggaatct cacaatctcc ttgaaaaaca aaccagccac 180  
 atgggaaaca tcatcaattt ttttacatgg aataaaatga gccatttttag aaaacctttc 240  
 aacaaccaca aaattggaaa ctc 263

<210> 5759  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<400> 5759

ctttggcttt gaggacttgc tccaatggct catcttttct tctattgaac ctttcttcat 60  
 aggcttgaag agaaccatc aattgggtcta cggtcattga gtctaaatcc ttagactctt 120  
 caatagcaca aaccacataa tcaaatttat cgattaagga gcgaaagatc ttttccacca 180  
 cacgaacatc ttccatattt tctccataac gtttcatttg gttcacaata gccaacacct 240  
 tgttgccaaa atctgagata gattcagatt ctttcatatg caatgattca aactctctac 300  
 gtatagtttg taggcgcacc ttttttacct tatcaacacc ttcaa 345

<210> 5760  
 <211> 315  
 <212> DNA  
 <213> Glycine max

<400> 5760

agcttgagac atcatgggta attcttctgc tcctatgttg cacaccggga agcaacagaa 60  
 gtaactatgt gtctctgcac ttcctttcca ccactccatt ctgatgatgg gtatgtggac 120  
 agatcaacct atgttgcaca ccaagttctg caagataatt ggtaaattggc ctatactctc 180  
 cccagtcag attgtacagc tttaacaggt aaattgaatt gagttttaac tagagtatga 240  
 aactgtttaa acagatcaag agtttcagat ttacttttca acaaataaag ccaagtaa 300



<210> 5761  
 <211> 314  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5761

agcttgngcc tctcttgtnt tttattgaan gnagcatata gatccgaaga cccttaggtg 60  
 ctttgctgat ggcttcttcc cgttccaagc ttcaattgga gtcttgtctt ttacagactt 120  
 agttggacat ctgttgagta tgtaaacagc agtgtagact gcttcagccc agaattgtgtt 180  
 aggtaatccc ttctccttga gcattgatct agccatttcc ataactgtgc gattctttct 240  
 ctcgaaact ccattttgtt gaggagaata tgcgactgta agttgtcgct caatgccttc 300  
 atcctcacia aatt 314

<210> 5762  
 <211> 325  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5762

agcttgtgca tccaataccc tgttgagggtt tgtcttatgt nccnaaaact ggattgatgc 60  
 atttgcttcc aaagtttcat ggccttgcag gtgaagacct gcacaaacat ttgaaagaat 120  
 ttcacattgt ctgctccacc atgaaacccc cagatgtcca agaggatcac atatttctga 180  
 aggcttttcc tcattcatta gagggagtgg caaaggactg gttgtattac cttgctccaa 240  
 ggtccatcac gagctgggat gaccttaaga gagtattctt agaaaaaatt ttccctgctt 300  
 ccaggacccc agccatcagg aagga 325

<210> 5763  
 <211> 336  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5763

agccgacctg cagcatgcaa gcttggttct aatttgattt tcattatatg acggnaccca 60

aggggacgtg cgagtaacaa ttattgccat ttgaatttgt tacgaaattc cgttttcaac 120  
 ttggagcaat ttaatatatt aggggactca attggacatc cgagtaaaaa gttattgtcg 180  
 tttgaatttg gtacgagctt ctattttcaa tttggaatgt atcgatatac tacgggactc 240  
 aatcgacat ccgtgtataa agttattgtc atttgaaaat gctcagagct tctgatctca 300  
 attttgagcg tgtcgatata ttatgggact caatcg 336

<210> 5764  
 <211> 331  
 <212> DNA  
 <213> Glycine max

<400> 5764  
 cccagcacgg gttctatgcc cgattctgct gttatctgag tccgaagcaa gaagccgatg 60  
 caactgcatg atggagttaa ccgccacggc ttcgttcgga ttcacctgca gcatccacgg 120  
 cttcacgtct tcaaggcgcc acgccgccac gccacgaaat gcaaacctaa cattcacgga 180  
 ccgcgccagc tcagcgagcc tgagcccaat ttcgcggagc gtgtcgcggt tgtcggacga 240  
 gggagccca attcccgatg gcctcaacag cggaggccca ccgggcccga gcgccagggc 300  
 ctgaatcagc gcgggccact ggagcccctg c 331

<210> 5765  
 <211> 318  
 <212> DNA  
 <213> Glycine max

<400> 5765  
 acctcagtgt gaaaagttat gactatttgt atttttcggg agcgtccgat gtgcattttg 60  
 gagcgtctgt atatgtgatg cgctgaata ggacatccga gtgaaaagtt atgaccattg 120  
 gaatttctca agagctggcg atgttaaatt tagagcgtct cgatataata taagcctgaa 180  
 tcggacatca gtgtgaaaac ttatgaccat tttaacttct ggagagcttc cggagagcat 240  
 tttgtagcgt ctatatatgt gatgcgcatg aattggacat ccgagttaag agttatgacc 300  
 attggaattt atcaagag 318

<210> 5766  
 <211> 317

<212> DNA  
<213> Glycine max

<400> 5766

agcttggttt cctccttctt cactacatca agaactcactg ggttgagtct tctttgtggc 60  
tgtcttactg gtttagcccc atcctctaaa tttatttgat gcatacatgt ggatgggcta 120  
ataccatgaa tgtccgccag ggtccagcct atagccttct tatgcttctt gagaactgat 180  
aacagcctct cctcttgctc atcagcaagg gaggcagata taattactgg aaaacttttt 240  
ctatcatcca agtaagcata ttttaaaatt gatggtagag gcatcaattc tgggtgtggc 300  
ggctggatag tggtaaa 317

<210> 5767  
<211> 282  
<212> DNA  
<213> Glycine max

<400> 5767

gaaatcaatc ttttcacata tctgcaaact catcaagctc caaaggattg gacatctcgt 60  
gcatttacct ccttgtcttt gctttgacct tctatgcaaa ctttccggcc ttcttctttt 120  
tctccaaagc tcgaatctat aagaaccagc tacctatgat gatacatagt tagaaagtgg 180  
aaagcttggg aaattataaa tatatatcga aaatatattg gtaagtacct gattcgggtga 240  
cacatagagt ggattctcat ataaagttgg gcctccaaaa ct 282

<210> 5768  
<211> 320  
<212> DNA  
<213> Glycine max

<400> 5768

agcttgcatt tcttccatga atttcttggg ctcgaaacgt gcgatgggtac cctagtgtgt 60  
caccaaattt gcttttgtca ttccaatgtc acgggtcaata atggaaagag tcttgttggg 120  
tttgtcgggc acaacacaga tgaagaacta tgggtaagca tcaagcttgc tcttgtcaga 180  
atgatcctcc ataattttta ctgcaacaac ggtataatct cctgtgtggc gtggcttcgg 240  
aggtggtggg tgatatggcg gcgggctgt acgccggtga ggaacagaac aaagctaagt 300  
cgtattagtg gagagaatcc 320

<210> 5769  
 <211> 324  
 <212> DNA  
 <213> Glycine max

<400> 5769

gcttggagaa agaaatatgg cttttttata gccgatgtct atttaagata tacataggtg 60  
 tgcctccttg catataaaca tgaatttttc aagggtcttg aaatattctg taaaagggtt 120  
 caaaaggaaa aggggttttgc atttcttcca tcaaaagtga tcatggaatt gagtttgaga 180  
 atgctgagtt caaatcattt tgtgaaagga atgggtatttt ttgcaacttc tcttcatcaa 240  
 gaacacctca actgaatgga gtaattgaaa gggaaaataa aactctacaa caaatgggta 300  
 ggaccatgct ttgggaaaac ttac 324

<210> 5770  
 <211> 304  
 <212> DNA  
 <213> Glycine max

<400> 5770

agctttctac tgcatttttag aattatggat ttcggcaatc ttgctctgac tattccctct 60  
 tcactttacg gactacaact gtccatcttg tgggtgctagt ttacatggat gatcttattg 120  
 tttcaggtaa tgattctgaa gctattcttc ggtttaagct ttatcttcat atatgctttc 180  
 atatgaagga tttgggaaga ttgaaatatt ttcttggagt ggaagttgct cgctcaccca 240  
 aaggaattta cttgtgtcaa agaaaatagc ccacggatat tattcttgaa actgggttac 300  
 ttgg 304

<210> 5771  
 <211> 377  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5771

tagggcctcc aaaatcatct aaatattatt agatgatgag agatcaactc atatcaagag 60  
 tatgttatca tcaatcattt tcttaaaatc taataattat aataagtcaa taattatata 120

cgcttaattc caagaaaata aattgtgagg atgaatgata gctcttggtt ggtgtgtaag 180  
 ttgatccatt ctcttattag atattatata ttctaattaa tcaacgatat aattatgaag 240  
 atcataaatt aatgaagtta agtaaagcta tattagacnt ttaaaaaata aacatttttt 300  
 tatccggagg atccagctat attataaatn taattagaat attctggcca tattattcaa 360  
 tcaatcttga atatata 377

<210> 5772  
 <211> 269  
 <212> DNA  
 <213> Glycine max

<400> 5772

cgttccta atctctacta ttgcaacacc tctcaatgag ctggcgaaca agattgtggc 60  
 gtttacctgt ggtgataaac aagagcatat ctctgctttg ctcatagatg aggttactaa 120  
 ggcacctgct ctagctctct ctgactttac taacacttgc gagctaaaat gtgatgccta 180  
 tggagtggga gcatgagcag tgttggtaca acgtgggcac cctattgctt agtttaatga 240  
 gaaactatgt agtgccttcc ttagctacc 269

<210> 5773  
 <211> 413  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5773

gcttacctag aagtatggca tggattactt cagcgctgta gcgcttggtta ctggaacttt 60  
 ggctcaacgc attntatcta cccttattac tctgaaaaag caggggcacc ttgcgtcctt 120  
 gaaccgataa ccatattttg gctaacctag cctcctccat ccctcgagtc caataaaggg 180  
 tagtacaaga atattcacct tttgtccatc gactacgccc ttcggccgga tcttatgcct 240  
 tgactcacc cccgtggatg aaccttacga aggaaccctt gggttttcga ggcattggat 300  
 tcttaccaac gtttagcgta gtcaagccaa cattcccgtt tctgcttcga ccagcactac 360  
 tcgcatgggt ccctccctgt aagatggtag actcccctac cgattcattt tac 413

<210> 5774  
 <211> 390

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5774

taattggaaa ctgaattcat tttttactat tgtaattgaa ggtgaatata tcttaactca 60  
 aaaactcttt tctacaattg aaaattttta atcttttagga tttctcaatt agggcaatca 120  
 ttaagttcaa gaatatctaa attatcataa ttgttgatat ttattcctat agaatttcca 180  
 actttgttac attatatctt aaattcaatc cttatttcaa tttcacagtt gtcgatagga 240  
 atatacgatc aacgcactat aagtgaccaa atgccaatat acaaaggcac taaattaaaa 300  
 aaagacaaac attcaattta aaagacatga atttgaatta cagataagaa ttcaaattac 360  
 atcaagttaa cagnaaattg agtacacatt 390

<210> 5775  
 <211> 413  
 <212> DNA  
 <213> Glycine max

<400> 5775  
 ctgtattttc atatccagga gggatgatcaa cacacactac ttcttgaata aaaccattca 60  
 aaaatgcact tttaacatcc atttgatttt gaaatcaatt atggatgcaa atgctaataa 120  
 gattctaatt gctagtaatc caaccactgg agcataagtt tcttcataat ctattccttc 180  
 ttcttgggta tatccttttag ctactaatat acttttattt ctaataacta ttaactactc 240  
 catgttcac ccaattgtct ctaaataccc atttagttcc aataattgga tgatcattaa 300  
 gtctatcaac taattcccaa acttgatttc tctcacattg atttaaattgc ctcttgcata 360  
 gcaactaatc aaatggatcat caattatggg ttcatattatg ttatttgggt caa 413

<210> 5776  
 <211> 458  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 5776

ggtaaactgt ttcattctgt tgataatgat gggtataaag ggcattctact ataagaaaac 60  
 ataaagatta tactagttca gtagtataaa gggtgatcct tacctttatt taatgcatag 120

tttctatggt catgctagtt caatagaatt agtgactttt gactctgttg aagtgttggt 180  
 tctttctgga gcatcgtcag ggataataaa gctttgggat ttggaagaag caaagagtaa 240  
 gttaattagt atattttgaa gtcatggact gtataatgta taatgatgtt attcatantt 300  
 gagaaagact gcaggtgagg aagtttgatg tctaattgtt ttgggaatga tgattgatgt 360  
 aggtggcat tgagttcttt attggattgt tgctntattt ttggaccatg ctgcttatca 420  
 tcacaggtac aagtggttct ttgtaaactt ttgatgtt 458

<210> 5777  
 <211> 435  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5777

aagctggcga tgtcgaaaat ctcagctgtt agctgtctag agaagaaatt gtggctcacg 60  
 ttgagactag tgaggtttgt gaagatgatg aattgcttcc ctgaaaccac acctcccaat 120  
 ttcttcatgg aaaggtctat ggaagttaca attgttgagt cattgttaca cttgatgccg 180  
 gaccaagaac atgcatagga tttcccagtt aattgtcctc cagagggcac cacccaattg 240  
 tgcaagctgt tgatcatc tacaagctcc gattntatgc tgagaagtgc ctctgagtaa 300  
 gggtaattg ctagaactgc tgatgatacc atgaagaagg taacaagaat aagatctttg 360  
 atgtagaagc atttgaaaat ctccattgga acttggagag catcacaagg tagagagggg 420  
 caattgtaag tcccc 435

<210> 5778  
 <211> 453  
 <212> DNA  
 <213> Glycine max

<400> 5778

cttagtaaag ctaaacacgt acaatctcca cctctggtga aatttgtcta aaacatactt 60  
 agacactttc tgagcaggta cgagcagtta tgcaagtggg atcagcaact ttcattatca 120  
 gagtaatcaa gcacagcgga aattctgcat gttgcaagtc gtttccagga tgtcaagaca 180  
 tctcacatga catcagcttt ctgcttctgc tgccctgtc tacatgctta ctgcagcatc 240

ttctaacagc tactagtctt ttccaggatg tcaagacatc tcatgtgaca tcaactgctc 300  
 cccctgtcta catgctctta ctgttgcatc ttttatcagc tactagtagc ttacaccagt 360  
 catcatcagc agcagcagtc tgccccctcaa aatcatatac atacaactcc ccctcaaaat 420  
 catgaagcat gcatacatcg tatectacta atc 453

<210> 5779  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<400> 5779

aacacacact actgtttgaa taaaaccatc tataaatgca cttttaacat ccatttgatt 60  
 ttgaaagcaa ttatggatgc aaaggctagt aagattctaa tggctagtaa tccaaccact 120  
 ggagcataag tttcttcata atctattcct tcttcttggt tatatccttt agctactaat 180  
 atacttttat ttctaataac tattaactac tccatgttca tccaatttgt gtctaaataa 240  
 cccatttagt tccaataatt ggatgatcat tacgtctatc aactaattcc caaactggag 300  
 tttcttcaaa ttgaattaat ccctcttgca tagcaataat caaat 345

<210> 5780  
 <211> 387  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5780

agcttgtctt gtgcagaatt agggtagaca ttcttttttt gagatnttta cacataattc 60  
 cagagcacac cacagtgcct attttgggaa aagagctctg gaggcaacaa gatgagcaac 120  
 ttttgcagag atacctaggt cttgtaatta gagagagatt agaagtttat gtagacgaca 180  
 tgatcgtaaa gagtaagcaa gtggatgaac acctagccaa cttgttggag ttgttaatgc 240  
 aactaaggaa atacaatatg agactcaacc ctagaaagtg tacttttcggg gtacaagtag 300  
 gaaagttttt gggatacatg ttaaccgaaa gaggaattaa ggtaaatccc gacaagtgta 360  
 aagccacatt ggagatgagg agtccta 387

<210> 5781  
 <211> 457



<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5781

ggttcatctt gagataatag gtgggtcatcc tcatttgaag ttgatgggtc atcatatttc 60  
tttggcctaa cagaaactcc aatattttta cagcttctaa tggtatgatt ggtttggcca 120  
caccttccac atgtaaactc agccaatttc ctcttttagct tatgtcctgt gacattgtcc 180  
tcatctacag atctctttct attattcttt ggccttcctc tttggaccct tntatgtggt 240  
ggaacaaggt gtgtatattg tgtctggggc caatattgtg gtccttggac tggttaataa 300  
aatgctggta tgtcttatta taaacttcta ttgacagcca ctcatgacac atgtccttag 360  
gcttccctcc tttgtgagtt atngttgcaa tggcatgtcg gcatggcatc cctacatcaa 420  
agttgttaaa tcagcacaca tgtacgttag gaatgaa 457

<210> 5782  
<211> 440  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5782

tatcatccaa tatagggata ggatatctat actttatagt taatttattn atggctgggc 60  
agtctgtaca catgtaccat gtcccatctt tctttggaac caagatcaca gggacaaaac 120  
acgggctaag actttccctt acaaaccct tntgcaagaa ctcatcaact tggctttgaa 180  
tctcctttgc ttcttctgga ctttacctat aggctggcct atttagaaat gaagcaccaa 240  
gaatgaagtt aatttgatgc aatacctctt aaaagaggta atccatatgg aatttcttct 300  
aaaaaaacat caacaaattc ctgtaacaag gaaacaatct cacaaggcaa agaagagtta 360  
aaatcgtag taaaataaac atcattgtac attagtacaa gtagctgctc tctggccatc 420  
aaagtactct caacctctct 440

<210> 5783  
<211> 374  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 5783

agcttaattt ttcttttaga atgttagttg tccttccttc aacctcactt cctcccatac 60  
ttnttccatt atttttagaa gcttttctct ttgaaccacc catttataac tctaaacagt 120  
ttagtgcttt agtcaatgat gctattcttt agaacaatag ggcaatgatc tgatacactc 180  
ctattcaaga catgatgaga gctcccttgc caagtgagta acccattctt tagatacaaa 240  
tactctgccc aacttactct ttacatggct atttggtta aaccatgtat acatcctttg 300  
aacaataagg atgtcctcta gctccatgta aaanatgaaa ccattaaact ccctaattgt 360  
cccttcacca ccat 374

<210> 5784

<211> 262

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5784

cattcactct gcaaagttn tgcaccgaga tcttaaacca agcaatttac ttttgaacgc 60  
aaactgtgat cctaagatat gtgactttgg gcatgctata acaacctcta agaccgactt 120  
tatgacagaa tatgggtgtca ctacgtggta cagagcccc gaattgctac tgaattgtca 180  
gaatatactc aactattgat atttggggcg ttggttgcaa tttgatggag ataaatagaa 240  
gggagccttt aattccttgt aa 262

<210> 5785

<211> 446

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 5785

agctntacta tgcagagaat atccaaggaa attaccttca tctgacttag catcaaattt 60  
tcctaagtta tcttttccat tattcaatac aaaacattta caaccaaaga tatgaagatg 120  
agagatgttt ggttttctgc cattgaccaa ttcatatgga gttttcttta aaatgggtct 180  
tattaaagcc ctatntaaac tgtagcatgc agtggttaacg gcttcagccc aaaagtattt 240  
tggaagagga gtatcattta ataaagttct agcaatctct tccaaagatc tatttttctt 300

ttcaacaaca ccattttgtt gaggggctct tgggtgcagaa aagttatgct taatcccatg 360  
 cttatcacaa aataattcaa attcttattt tcaaactcac ccncatgac anctctaata 420  
 gatataatct ttagattttt ctattt 446

<210> 5786  
 <211> 216  
 <212> DNA  
 <213> Glycine max

<400> 5786

gcttactatg caaggaataa ccaaagaatt tttcttcac tgacttagca tcaaattttc 60  
 ccaagttatc ctttccattg gttaatacaa agcatttgcc accaaaaaca tgtagatgtg 120  
 agaaatttgg gttcctaccc ttaaacaata ttgatggagt tttctttaa ataagtccta 180  
 ttaaagccct attcatgata taacatgcag tattaa 216

<210> 5787  
 <211> 458  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5787

cttgtgtaat cgattacact tatttggttaa tggattacca gtgactattt ctgtaaaaat 60  
 caaaagggtg aactcttcaa aaagggttctg actttttcaa atgagtttta agtttttcta 120  
 aaagttataa ctcttcaaaa aggatttgac tttttcaa atgggttttaag tttttctaaa 180  
 agttataact ctcttaa atcttcttga ccaaacatgg agagtctata aaagcaaggg 240  
 tttgttttgc atttcaacaa tcttgaatac ttttacactt attcaacaat cctttacaag 300  
 ccttgactct ctttgaattt cttcttcttc tttgtaccaa aaagctttct gaagttttct 360  
 gggttttcaa accttgaaaa cttgtgctat tcatcttttc attctcttct ccatttgcca 420  
 aanagaattc accaaggact aaccgctga attctttt 458

<210> 5788  
 <211> 243  
 <212> DNA  
 <213> Glycine max  
 <400> 5788

aatagtagct cctagcaaat tcaaaccata ataactcttt actcggatgt ccgatttgtt 60  
 tccgtagtat atcgtgacgc tccaaattga aaacataagg tctgagcaaa ttcaaacgtc 120  
 aataagcttt tactcagatg tcccattgag tcccgtaata tatcgagaat gtcctcaaatt 180  
 gataatagta ggtccttcca aatttaacca taataacggt ttactcggat gttcgattga 240  
 gtc 243

<210> 5789  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5789

ntcgagaatn taaaattgtc ataactnttc actcggatgt ccgattcaag cacatcacat 60  
 atggagacgc ccgaaattga acaacggaag ctctcgagaa attgaaatgg tcataacttt 120  
 tctcggat gtcggattca ggcacatcac atatcgagac gtcctaaaatt gaacaacgga 180  
 agctctcgag aaattcaaact gggtcataact tatcactcgg atgtccgatt caggcgcac 240  
 atatatcgag acgctcgaaa ttgaacaacg gaagctcttg agaaattcaa atgatcataa 300  
 cttttcactc ggatgtccga ttcaggcgca tcatatatcg agacgctcaa aattgaacaa 360  
 cggaagctct cgagagatca aatgggtcata acttttcact cggat 405

<210> 5790  
 <211> 263  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5790

agcttccatt gttcaattnt gagcttctcg atatatgatg cgctgaatc ggacatcctg 60  
 agtgaaaagt tatgaccatt tcaatttctc gagagcttcc gttgctcaat ttcgagcgtc 120  
 tcgatatgtg atgctcctga atcggaacctc cgagtataa cttatgacca tttgaatttc 180  
 tcgagagctt ccgttgttca atttctaacg tctcaatatt tgatgtgcct gaatcagaca 240  
 tctgagggaa aagctatgac aat 263

<210> 5791  
 <211> 447  
 <212> DNA  
 <213> Glycine max

<400> 5791

tcgcacttga taatggaggc acatgaacag cgctaggcaa tgacattcat ggtgctccaa 60  
 acaaagggtg agtatggagg attgccttga ggggccgcaa ttaggcaatc atgaaactca 120  
 tctccaaaact cgaaagtgga gaacacatga acagccctaa gcaataacat tcacgtggct 180  
 acgaaatagg atgagaatgg aggatcgctt tgagggtcct ctcttattca atcatggaac 240  
 acagctccaa actcaaaagt ggagaacaca tgaacagccc taagcaataa cattcatgtg 300  
 gctccggaaa aggacgagaa tggaggattg ccttgagggt cctctcttag gcaatcatgg 360  
 aatacagctc caaactcgaa aatggagaac atgtgaatga caacgcaatt cactcacgtg 420  
 gctccagaaa aggatgagaa tggagga 447

<210> 5792  
 <211> 323  
 <212> DNA  
 <213> Glycine max

<400> 5792

agctagtcca atcgatttag agaaatgcct tcataagcat atctgcatat tgatcaattg 60  
 cacggatcat gaatgacacg attatgagca agagaaatat tgctcaaatt atcaccaaaa 120  
 attctaggaa tagtgtgaga aactttcagc ttaaacaaca aggtctgaat ttgttggacc 180  
 tctaattgat ctggagcaag gttccagttc ttatgcttca gtgctagaac gagcaacaac 240  
 agattgcttt ttggaccacc aagagaccat gctgggtcct atatagaaaa aagcattgaa 300  
 tgtagacccc ctgttctttg gat 323

<210> 5793  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 5793

tcaatcttta atggagaagg ttaccactac tggaaaaccc gaatgccaat ttttatcgag 60

gcaatatatc taaatatctg ggaagccatt gaaatagggc cttatatacc caccacagta 120  
gaaagagttt caatagatgg tagttcatca agtgaaagca taaccataga aaaacctaaa 180  
gatagatggt ctgaagagga tagaaaacga gtaccataca acctaaaagc caaaaacata 240  
ataacatctg ccctaggaat ggatgaatat ntcagagttt caaattgcaa gagtgctaaa 300  
gaaatgtggg acactcttcg ataacacatg aaggaactac agatgttaaa agatctanga 360  
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<210> 5794  
<211> 309  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5794

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tcatacatcc gagtaacaag atattgtcgt ttgaatttgg tcagagtttc gataatcaat 180  
ttcgagcgtc tcgatatatt acgggactca atcagacatc cgagtaaaac gttattgtcc 240  
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<210> 5795  
<211> 389  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5795

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tttttattct gatgtctgat tgagtcccgat aatatatcga aacgctcgaa attgaatggt 180  
gaagctctga gcatattcaa acgacaataa cgttttactc ggatgtctga ttgagtcccg 240  
taatatatcg agacgctcga aatggaatac cgatgctctg agcatatata aacgacaata 300  
actntttact cggatgtctg attgagtgccc ggattatata gagacgctcg aaattgaatg 360

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389

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<211> 430  
<212> DNA  
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<400> 5796

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agcaaagtca ttgatccagt aatgtttgat gagttggaaa atgaggccgc aattatactg 180  
tgccagttgg agatgtatct tccccctgct ttctttgaca tcatgattca cttgattgtg 240  
catctgggtc gagaaatcaa atgttgtggt cctgtttatc tacgggtggat gtaccggtt 300  
gagcaatata tgaagatctt aaaagggtat acaaagaatc tatatcgtcc agaagcatct 360  
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<210> 5797  
<211> 392  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5797

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gattgcaaaa tggaggattg gatcaagtaa taatatgcct ctatgttgat gatctattgg 180  
ttattgggaa caatcttaag gagattgatg atttcaaac tgacatgatg tttgaatntg 240  
aaatgataga cttgggaaga ctcatgtatt tcttaggtat agagtttaca aatgcttcaa 300  
ccagaactat cttgcaccaa aagaagtatg cattagaaat attgaaaaga ttcaatatga 360  
ctaattgcaa cttagtgtg acaccaatgg at 392

<210> 5798  
<211> 413  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 5798

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taatacccat aaaccaaagc tacaataaaa actgataatg tacttacaca gttacacttc 180  
cctagcatga ataatatcct aagtttttta gaatttattt aagttgctcc agtgccatga 240  
gaccatgccaa aaagaaatcc aattaatata acaatgttag aaactaaata ctcatgacag 300  
gaatgcttac atgtgactaa aataaaatta aacaaaatac aaatatatat ctttttaatt 360  
aatggagatc aatatagaac aaacatatag tagtgatgat catagcaatc aaa 413

<210> 5799  
<211> 457  
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<400> 5799  
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ctttatcata atcctcatct tcaactcaac tacagtcaac aaccaaacia ttcaaaciaa 180  
gattattaga tgtgaaaaat aagggaagaa aaaaataatg agacatcagg ctttatgtta 240  
gggagaataa aaaaccacac tcttgcaatt aggttttgaa gtaacgtatt atgagataag 300  
gaagaagaat gatccattca agtgagcgag agtccaaagc gagcttcac gtgtgaggca 360  
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accatgagtg gtatgtgtcc aacacttcag aatccat 457

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<212> DNA  
<213> Glycine max

<400> 5800  
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